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The Importance of Professional Boundaries in the Practise of Traditional Chinese Medicine in the U.K.

Rachel Millsted

"A physician needs to possess a moral conscience, ethical conduct, and compassionate attitude towards those in need of attention. In all interactions with patients the physician is always composed, takes the necessary time, remains objective, and performs every procedure with the utmost care and precision." (Neijing Suwen, p300).

I was invited to write this article to highlight the importance of professional boundaries within the acupuncture and Chinese herbal medicine community of practitioners. As we see in the quotation above, taken from Moashang's 1995 translation of the Neijing Suwen, there is a long understanding of the need to be an ethical practitioner by those practising Traditional Chinese Medicine. In an ever-evolving world, we must look to all aspects of our profession to continuously develop and adapt to the current expectations of what is deemed to be professional practice.

In my experience of teaching acupuncture students in the U.K., I have found that for some students, the fervour to learn about diagnosis, acupuncture points and needling take precedence over becoming a well-rounded practitioner which includes the skills around ethics, communication, and boundaries. I have found that those who tend not to be interested in learning about and examining their own boundaries are often the ones who actually need to consider these topics and work on them the most. Awareness is key when thinking of boundaries so a reluctance to engage in the kind of reflective process that is essential for this kind of work is often a sign that at best, there is no consideration of boundaries and at worst, a distinct lack of boundaries is present. Thankfully, most students will engage with this work on some level and begin the layering of skills that it takes to be an ethical practitioner with an understanding of professional boundaries.

I am a practitioner support consultant for the British Acupuncture Council – I speak with practitioners and offer support sessions for when practitioners are experiencing difficulty. From speaking with many different acupuncture practitioners, when a difficulty has arisen with a patient, it is often due to the practitioner either not being clear about their own boundaries or not communicating them effectively to the patient.

It may be helpful to elucidate in what is understood by the term 'professional boundaries' – this is the "edge or limit to what is acceptable behaviour within the clinical setting" (Gabbard, Crisp-Han and Hobday, 2014, p.1160). It incorporates many aspects such as communication, confidentiality, the receiving of gifts, prohibited sexual contact and dual relationships. There is an inherent power dynamic within the practitioner-patient relationship and as we need to be aware of potential ethical issues to prevent problems arising. We need boundaries to prevent the exploitation of either of the parties, both to protect the practitioner and the patient, and to set the interaction within the context of a professional interaction (Strasberger et al, 1992). When the rules of therapeutic relationship are differently understood, unaccepted, or not respected by either party boundary transgressions can occur (Farber, 2000). If boundaries are not clear, this can lead to unrealistic expectations from the patient/client, and if these expectations are not met, it may affect the patient/practitioner relationship in a negative way (Truscott & Crook, 2005)

To aid practitioners in this endeavour, the Association of Traditional Chinese Medicine & Acupuncture UK (ATCM) has developed a Code of Conduct which explicitly states what is expected in terms of professional boundaries. This is a set of standards that members agree to as part of their membership of the ATCM, particularly around how practitioners conduct themselves with their patients. It helps patients to know what they can expect from their practitioner - that they will not only receive excellent treatment in terms of the acupuncture and herbs they receive, but that they will also be treated professionally in terms of how their personal information is managed, how they are communicated with and the attitude of the practitioner.

An ethical code represents a tool to explain both the belief systems, represented by the expected behaviours consistent with the mission and the values of the organisation and the boundary systems represented by the behaviours to be avoided (Ethics and Compliance Initiative, 2022). The code is in place to support the practitioner with their day-to-day decision making and is a useful tool to refer to when guidance is needed. It also acts as valuable point of reference for allied health professionals and the public to understand the standards of practitioners who are members of the ATCM, demonstrating the professionalism that can be expected by having treatment from a member. It allows for transparency around professional boun-daries which may allow members of the public and other health professional confidence in seeking treatment from an ATCM member.

Little is known about the attitudes of TCM practitioners towards the codes of conduct in the largest acupun-cture practitioner organisations in the U.K. (At the time of writing, I could not find examples of papers for research

in this subject area). Questions that may be asked are 'do practitioners know about the code?', 'What are practitioners' attitude towards the code of conduct?' and 'do practitioners use the code to guide them?'. By examining the attitudes of other health care professionals, we may begin to find answers and parallels to our profession. In their recent, scoping review, Collin-Hughes, Townsend and Williams (2022) found that there was great variation between professions (doctors, nurses, paramedics) in how they viewed codes, their knowledge of the codes, how they applied the codes and whether they felt their own personal judgement and morals superseded that of any code. This variation continued across the professions in different countries as well (Ibid). They concluded that 'most health professionals know the codes exist, but do not think they know the content. Despite valuing professional codes highly, healthcare professionals do not use them regularly in clinical practice" (Ibid). It may be beneficial to survey ATCM members to find out their attitudes towards and use of the Code of Conduct – do members' responses match or differ to other healthcare professions? And if practitioners are not engaging with the code, and utilising it to help them make ethical decisions, what is needed to change that, and help practitioners engage with it?

Whilst professional codes are there to support the practitioner, inevitably, they cannot provide all the answers. If we think of professional boundaries as discussed in the code of conduct as 'hard' boundaries, explicitly set out by the ATCM for practitioners to adhere to, we can also think that there may be many more 'soft' boundaries that are implicitly and explicitly negotiated between the practitioner and the individual client (Zur, 2015). If a 'hard' boundary is over-stepped by the practitioner, this would be a boundary violation and could potentially result in disciplinary action from the ATCM should a complaint be made by the patient, or if the violation were criminal, for example, sexual assault, it could result in criminal charges being brought. These things have clearer 'yes' or 'no' answers. It is a much more subtle and nuanced question if we ask 'how do we manage our 'soft' boundaries as practitioners?' 'Soft' boundaries are things such as time keeping, cancellations, well considered self - disclosure from practitioner, non-sexual appropriate touch such as a hug (Zur, 2000). Here we may see a need to be flexible in our professional boundaries so very different from the simple 'yes' and 'no' of the 'hard' boundaries. Practitioners must frequently make decisions based on their professional judgement of a particular situation in a particular moment in time. Context is key in these situations (Gabbard, Crisp-Han and Hobday, 2014). The context is all of the elements of the therapeutic encounter with an individual patient. It encompasses the needs and history of the patient as well as the skills and individual boundaries of the practitioner. We can see that there would be arguments for a crossing of boundaries to maintain or enhance the therapeutic relationship, for example a patient who came into the appointment highly distressed and is leaving calm after the treatment wants to thank and hug the practitioner. It is the practitioner's judgement in the context of that patient and that particular therapeutic encounter on whether they would hug the patient or not, as well as their own personal boundaries. Goodine (2017) states that it is of paramount importance to make therapeutic professional judgement by considering what is in the best interest of the client. I would add that it is also must feel acceptable to the practitioner, so they do not feel they are compromising themselves, both personal and professionally.

To highlight an important point, there is a difference between boundary violations and boundary crossings. Boundary violations refer to unethical, exploitative behaviour of the practitioner and are unacceptable within the profession, whereas boundary crossings can be part of a considered therapeutic plan e.g., a home visit for a housebound patient, or part of a considered response in the moment to a situation that arises during a treatment (Zur, 2015).

As practitioners, we may find ourselves in dual relationships. This refers to having a relationship with the patient outside of the therapeutic relationship. This may be a friendship, familial relationship, business relationship, a member of the practitioner's community, for example. Dual relationships can be said to inherently cross boundaries as their nature is different to that of a purely therapeutic relationship but can be well managed and beneficial to both the patient and the practitioner. It may be necessary to have conversations with each individual in these circumstances about how the dual relationship is handled, again considering the individual context, and what each of you expect e.g., if the practitioner's accountant is coming for treatment, the practitioner's tax return is not discussed during the treatment, and the patient's treatment is not discussed during the practitioner's tax meeting. Another example is having specific conversations around confidentiality when treating members of the same family or community to reassure the patient that their private information will not be shared. Many practitioners avoid dual relationships due to having manage the relationship in different context and the potential difficulties that can arises in these situations.
However, for some practitioners, dual relationships may be difficult to avoid, for example if the practitioner lives in a small community. The question is, as with all boundaries, how can this be managed by the practitioner?

We can think in terms of prevention – trying to prevent difficulties happening in the first place by educating ourselves, being clear on what our professional boundaries are, by engaging in supervision with another practitioner to help and guide us in our practice and engaging in self-reflection. Some useful reflective

questions the practitioner can ask themselves when assessing and reflecting on their behaviour are:

- Would I tell a colleague about this activity or behaviour?
- Would another acupuncturist find my behaviour acceptable?
- Could my actions with the patient be misunderstood?
- Will these actions change the patient's expectations for care?
- Will these actions bias my clinical decision making?

This can enable the practitioner to assess their decisions in the moment and determine whether they feel the action is appropriate, and whether they would repeat this action or recommend it to others. If they determine that the decision affects the client or themselves adversely, they may need to re-evaluate and consider their decision before actioning that decision (Foster-Miller and Thomas, 1996).

In conclusion, it is important that we, as practitioners of an ancient and proud medicine, behave in ethical ways. Codes of Conduct are there to support the practitioner in their decision making and to understand the current standards expected of their membership body. We can see that there are some boundaries that should not be broken and would constitute a boundary violation and others that may be crossed to the benefit of the patient, depending on context and the decision making of the practitioner. These 'soft' boundaries can differ from patient to patient; one situation to the next; they may change over time. What is of the utmost importance is the practitioner being aware of their Code of Conduct and of their boundaries, their own decision-making processes, and how they communicate this to their patients.

References

1. Brooks, K., Eley, D., PhD; Pratt, R., Zink. Management of Professional Boundaries in Rural Practice. Academic Medicine 87(8):p 1091-1095, August 2012. Available from DOI: 10.1097/ACM.0b013e31825ccbc8
2. Collings-Hughes D, Townsend R, Williams B. Professional codes of conduct: A scoping review. Nursing Ethics. 2022;29(1):19-34. Available from doi:10.1177/09697330211008634
3. Farber, N.J. (2002). Physicians' Experiences with Patients who Transgress Boundaries. *Journal of General Internal Medicine, 15,11, 770-775*
4. Foster-Miller, H., & Thomas, D. (1996). A Practitioner's guide to ethical decision making. American Counselling Association. Available from https://www.counseling.org/docs/ethics/practitioners_guide.pdf?sfvrsn=2 accessed on 10/10/23
5. Ethics and Compliance Initiative (2022). Available from https://www.ethics.org/resources/free-toolkit/code-of-conduct/ accessed on 10/10/23
6. Maoshang, N. (1995). *The Yellow Emperor's Classic of Medicine: A New Translation of the Neijing Suwen with Commentary*. Shambala, Boston and London
7. Strasburger, L.H. Jorgenson, L. & Sutherland, P. (1992). The prevention of psychotherapist sexual misconduct: Avoiding the slippery slope. *American Journal of Psychotherapy*, 84 (4), 544-555.
8. Truscott, D., & Crook, K. (2005). The CAP Monitor. *College of Alberta Psychologist*, 20, 2-4.
9. Zur, O. (2015). Dual relationships, multiple relationships, boundaries, boundary crossing & boundary violations in psychotherapy & mental health. Retrieved 10/10/23, from http://www.zurinsitute.com/dualrelationships.html
10.Gabbard, G., Crisp-Han, H., Hobday, G.S (2014). Professional Boundaries in Psychiatric Practice (1160 - 1174) in John Z. Sadler (ed.) et al. *The Oxford Handbook of Psychiatric Ethics, Vol. 2*. Oxford University Press, Oxford available from https://doi.org/10.1093/oxfordhb/9780198732372.013.27 accessed 10/10/23

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Rachel studied psychology and worked in NHS mental health services before becoming an acupuncturist. Her interest in mental health has continued and has led to her using acupuncture in a specialist trauma service, and further studies of an MA in Dance Movement Psychotherapy and in Somatic Experiencing.

新型冠状病毒感染疫病思路与常用方药

首都医科大学附属北京中医医院 刘清泉

自 2019 年底新型冠状病毒感染疫情爆发至今，新型冠状病毒从原始株（SARS-CoV-2）到德尔塔变异株、到现在奥米克戎变异株，其发病的特点也发生了转变，不同地域、不同人群发病的临床表现也有不同。在大量的实践中，从中医理论进行分析思考，运用中医药进行治疗探索。在摸索中前进、摸索中找出了它的救治的方法，在大量临证中形成了中医药辨治新型冠状病毒感染疫病特有思路与系列有效方药，今与同道分享。

1. 疾病本质的认识

新型冠状病毒感染具有发病快、传变迅速、易感性强、流行性等特点，属于中医“疫病”范畴，其主要病性特点为“湿毒”，称为“湿毒疫”。[1]

1.1. 关于新冠感染的传染性认识。

新冠感染是一个传染性很强的、烈性的传染病，而随着新型冠状病毒原始株、德尔塔变异株、奥米克戎变异株的变迁，总体其毒力减弱，但传染性更强。从历史的角度比较，从鼠疫，或黑死病，包括 1918 年的大流感，它的传染性都很难与此次新冠肺炎相比。

1.2. 温疫与伤寒及温病

新冠病毒感染属“温疫”中的湿毒疫，不同于伤寒，也不同于一般的温病。

仲景所言伤寒，为寒邪袭表。太阳病，或已发热，或未发热，必恶寒、体痛、呕逆，脉阴阳俱紧者，名为伤寒。伤寒表现为恶寒，非温疫之初表现的憎寒，在吴鞠通的《温病条辨》以及吴又可的《温疫论》[2]中都提出是“憎寒”，非常冷的一种恶寒，“憎寒”和恶风、恶寒不同。虽此次疫病或兼夹风夹寒等外感之邪，治疗中可能用到葛根汤、麻杏石甘汤等经方，而风寒之邪只是其诱因，其根本属性不属于伤寒，而属于湿毒疫。正如明代名医吴又可亲身经历了温疫的多次流行、临证观察及诊治后，他发现温疫与伤寒学说完全不同，提出“温疫与伤寒，感受有霄壤之隔”。伤寒发热，体若燔炭，汗出而散，治疗多较为迅速。而此次疫病，缠绵难愈，并非一汗而愈，究其原因，是其邪气属湿毒疫厉之气。

一般所言温病，多指感受非时之气而引起的温病。其临床表现如仲景所言：太阳病，发热而渴，不恶寒者，为温病。新冠疫情是由疫厉之气引起，新冠疫病发病可兼夹非时之气而发病，或称之为杂气，可兼夹风寒暑湿燥火而发病。

2. 病因学认识

《千金方·论诊候》中讲到 “夫欲理病，先察其源，候其病机”，源是什么？就是病因。病因是诊断疾病、治疗疾病关键中的关键。目前多强调辨证论治，而对审因论治认识不够。缺乏了对于因的认识，只有对于证的认识，整个治疗有时就抓不住核心特点。

新型冠状病毒感染的病因属非风、非寒、非暑、非湿的湿毒疫厉之气。“湿”是特征，“毒”是根本。湿为阴邪。毒可阴可阳。两阴相加易治，阴阳之邪相加难疗。毒易热化，湿热毒邪为病，其治疗多变缠绵。

新冠病毒的湿毒疫厉之气，可夹四时之气，四时之气为诱因，可有热化、寒化、燥化之不同，然而，疫之为病，四时寒温之变仅为诱因而已，“疫毒”方为本病的根本。

另外，因地域的不同、体质的差异，会存在寒化、热化、燥化等差异。例如，初到武汉，刘清泉教授看到了寒象，实际上这寒象是因为武汉气候导致的一种自然的六淫之气，这寒只是个诱因。诱发完疾病以后随之就走，而疫疠之气才是这个疾病根本。在不同地域的新冠发病，可以夹风、夹寒、夹湿、夹热等等，但这些均为诱因，其根本还是疫疠之气。此外，正气不足也是发病的重要病因。

随着时间的变迁，湿毒戾气在变迁。从新冠病毒原始株到德尔塔变异株到奥米克戎变异株，新冠病毒感染表现的特点也在变化。

新型冠状病毒原始株（SARS-CoV-2）多表现为湿毒之性。早期病情缠绵、反复，传染性强。病人普遍反应乏力、倦怠，身热不扬，午后尤甚，咽喉疼痛，背痛，持续 7-10 天后，往往会突然出现高热、咳嗽、干咳、无痰或少痰而粘、胸脘痞满、脘腹胀满。在 7 到 10 天之内，部分患者出现大便不畅、或大便粘滞、便溏或纳呆、运化呆滞等脾胃症状。随着发热，患者会出现喘、闷、憋气、干咳、咳嗽。新冠肺炎所表现出来的喘又不同于哮喘病和 COPD（慢阻肺）患者所表现出来的喘；表现为闷，也不是慢阻肺患者所表现的闷。此属于肺气的郁闭，肺的宣发和肃降的功能受限，表现为“憋气、动则尤甚”，这是一种短气，而不是一种气短，而临床上很容易把它和闷、和喘相混淆。重症的病人会出现神昏、烦躁，即闭证，属于邪气内陷营血，内陷心包而导致的闭证。新冠肺炎患者舌象的变化，常见有舌色淡、淡红、黯、紫黯；舌体都是胖的，很少出现瘦的舌。舌苔以腻为主，不管是薄的、厚的、黄的、燥的，腻苔是核心。实际上反应了疫病的特点是非寒非热的而是以湿毒为特征，可以进行各种变化的这样一个传染病。

新型冠状病毒德尔塔变异株多表现从原始株的湿毒之性转化为湿热毒之性。湿郁化热，其毒性表现为传染性加强，而毒害力量减弱。其死亡率较原始株为低。4 临床表现均以咳嗽、咽痛、咽干等上呼吸道症状和发热、乏力等全身症状为主。很多研究结果[3]也证实

了这一点，与武汉原始株相比较， Delta 变异株组的发病平均年龄低、病情更轻、死亡病例数少。
新冠病毒奥米克戎变异株则表现为风热夹湿夹毒。关于湿毒疫厉之气，湿郁化热，热极生风，而其毒性，毒害作用进一步减小，而传染性进一步增强。因此其表现为风热夹湿夹毒的特点。其死亡率进一步降低。研究表明[4]，奥密克戎变异株感染者发展成重型或危重型的比例低于于德尔塔变异株感染者。

3. 病机学认识

“夫欲理病，先察其源，候其病机”，新冠感染的核心病机是什么？要始终抓住湿毒首先侵犯的部位和核心病机。第一，它的病位在太阴，手足太阴。它所侵犯的部位主要在太阴，肺和脾。第二，疾病发生的核心病机变化是风、热、湿、毒、痰、瘀、虚这样一个变化。
湿毒是它的病因，湿毒（转化传变）在中国所见最多的是以化热为主。热邪会炼津液为痰，也可以湿毒内阻而成瘀。这种瘀、痰、热的内聚，会造成虚。虚的变化首先是津伤，其次是阴亏，再进一步变化是耗气，再就是阳脱，脱证，这是整个病机的发生变化。它主要发病部位在肺又在脾胃，病情变化是围绕着手足太阴去发生变化的。肺的宣降失司，湿毒化热，热耗津、耗气，热炼津为痰，湿毒内阻而化成瘀。湿、毒、热、痰瘀阻滞中焦气机，升清降浊失司，病情就发生了巨大的变化，进入了一个非常难以纠正的局面，成为这个病的病机特点。[5]

4. 分期辨证论治

4.1. 分期论治

中医治疗外感病、温热病的辨证思路，如张仲景的六经辨证，华佗对于伤寒病的皮、肤、肌、胸、腹的论治，叶天士的卫气营血辨证，吴又可的表里传变，薛生白的正局变局，均有由表到里、分期论治这样一个内涵在里面，都是由表入里，由浅入深。针对新冠肺炎的疾病特征，新冠肺炎分成早期、进展期、极期和恢复期四期进行论治。
对于轻型和普通型，也就是早期和进展期的患者，因为疾病的症状是一致的，病因是一致的，所以往往用一个主方去解决。然而需要根据具体情况进行加减化裁。有的患者可能以化湿为主，有可能以解毒为主，有可能以清热养阴为主，但这一变化不外乎湿毒疫厉之气演变的不同阶段，只要灵活合理运用，最终都可以取得很好的效果。宣肺败毒方（生麻黄、苦杏仁、生石膏、生意米、苍术、藿香、青蒿、虎杖、马鞭草、芦根、葶苈子、化橘红、生甘草）是治疗轻型和普通型的主方，与目前奥米克戎治疗中的清肺解毒汤（麻黄、生石膏、北柴胡、黄芩、青蒿、麸炒苍术、马鞭草、广藿香、甘草片）即一脉相承、大同小异，体现了从太阴肺和太阴脾清化湿毒疫厉之气的思想，前者侧重化湿解毒，后者侧重清热除湿解毒。
对于原始株感染重症病人和危重病人，大概 25%左右，有发病即是重症和危重症的。一般在发病的 3 到 5 天之内就成为重症。这种情况属于“直中”，但绝大部分病人是由轻症转变而来的，往往是失治、误治造成的，轻症转变为重症的时间大概是在 7-10 天左右。失治是根本没有得到及时有效的治疗，也没有经过什么药物干预，而误治是治疗的方法不对，而变成了逆证、坏证。危重第一个临床特点是高热、咳嗽，干咳无痰，咳声连连。第二，疲乏，憋气，不能活动。在平静的情况下，氧饱和度小于 90%，他外周血的淋巴细胞持续下降，C 反应蛋白持续升高，D-二聚体升高，这是新冠肺炎病情重的特点。从 CT 上，大概在 48 小时内，患者肺内病变迅速进展，大于 50%，出现从肺的内带和外带全部牵涉，多肺叶受损的特点。从患者舌象的变化进行观察来看，舌体的紫、黯、红、绛，舌体胖大，舌苔厚腻，或焦燥，这类舌象往往是重症的明显特点。对于重病人和危重病人，一定是采取一人一法，一人一方，但是“一人一法，一人一方”里面，进行中西医有效的配合，有机融合，是最后达到提高病人的治愈率，降低病死率这一目标的关键。对于危重症。从中医角度去认识机械通气、血滤、ECMO、液体治疗这些现代技术手段，即呼吸机具有很好的益气温阳作用，血滤具有凉血解毒的作用，ECMO 有固脱的作用，液体治疗对防止病人伤津耗液有非常重要的治疗作用。用中医的理来思考现代技术，对中医的治疗是有非常重要的一种辅助，也是提高临床救治能力的一个根本。
新冠病毒感染分期论治当中的辨证思维，没有脱离温病学的卫气营血辨证、三焦辨证、正局变局的辨证，然而与之不同。新冠病毒感染的病位，首犯太阴，包括手太阴肺和足太阴脾，与《温热论》的“温邪上受，首先犯肺”不同，与《湿热病篇》的以脾胃为中心的正局变局也不同，与《温疫论》首先湿阻膜原也不同。因此肺肠同治是新冠病毒感染治疗的第一个特点，也是防重症的关键点。针对核心病机变化：湿、毒、热、痰、瘀、虚的辨证施治，祛湿、解毒、清热、通腑、增液、化痰、化瘀、补虚随病机变化而施用。

4.2. 审因论治

审因论治是新冠病毒感染疾病中非常重要的原则。紧紧抓住病因，洞晓其演变，综合考虑其体质和诱因，是治疗新冠极为关键的环节。新型冠状病毒感染的病因属非风、非寒、非暑、非湿的湿毒疫厉之气。其可夹四时之气，四时之气为诱因，可有热化、寒化、燥化之不同，此外，因地域的不同，会存在寒化、热化、燥化等差异。本病重型及为危重型患者多为有基础病的老年患者，正如《广温疫论》记载：“时疫较之风寒，本为难治……而夹以脾虚、肾虚者更为难治。”体现了疫病与体质、年龄的密切关系。随着时间的变迁，湿毒疫厉之气在变迁。从新冠病毒原始株到德尔塔变异株到奥米克戎变异株，新冠病毒感染表现的特点也在变化。从湿毒、到湿热毒、风热夹湿

夹毒，湿郁化热，热极生风，毒害减小，传染性变强等这就是新冠病毒的主要演变规律。因此，要三因制宜，知常达变，灵活用药，从而提高临床疗效。

4.3. 截断扭转

在认识到新冠病毒感染的传变规律以后，可以进行阻断治疗，发挥中医的“治未病”的特点，去防患于未然，以此为治疗法则。特别是很多患有基础病的患者包括老年患者的治疗，因其常常病情的突然加重，使得新冠病毒感染疾病的治疗更为棘手，防重症成为临床中重要的内容。

关于阻断，在《黄帝内经》中称为截断扭转。先证而治是截断扭转思想的具体体现。对于轻型、普通型患者，抓住疫病的根本病机以通治方给药，“肺肠同治”，便是抓住了“证”的先机，可有效降低患者的转重率。对于重型患者的辨证论治，则应一人一策，早逐客邪，可以截断重型转向危重型，减低患者死亡率。

4.4. 基本治法

针对疾病的临床特点之后，在诊治新冠肺炎过程中主要利用三种基本治疗方法进行综合治疗。

第一， 祛湿。祛湿法有芳香化湿、苦温燥湿、淡渗利湿。湿浊内蒙、湿浊内闭是新冠感染的特点。强调要把祛湿作为一个核心的治疗方法运用。

第二， 解毒。治疗热病，仲景有辛凉法、辛寒法，但到了叶天士、吴鞠通时代，强调了解毒法。如银翘散即清热解毒药加辛温发散，即辛凉清解法。治疗新冠病毒感染，要选择一些有抗毒作用的中药，如黄连、黄芩、虎杖等这些解毒药物配合使用。

第三， 清热、通腑、增液、凉血、活血。此外，还要配合泻肺、开窍，如果病情再进一步发展，可以综合使用救阴、通阳、益气、固脱等方法，这就是新冠病毒感染救治过程中所运用的一些基本治疗方法。

湿郁化热，则应清热。邪热伤阴，则需养阴增液。热入血分，则需凉血活血。湿毒闭肺，则需泻肺开窍。

温病下不厌早。选用大黄一味来通腑泄热。大黄是发挥核心的治疗作用，用好大黄，对新冠病毒感染干预和治疗非常重要。在整个救治的过程中，对于轻症的病人和普通型的病人，也就是在早期和进展期，运用化湿清热、泻热泻肺的方法能够很好的阻断疾病的发展，起到很好的救治效果。中药用的越早，效果越好；用的越晚，效果越差。一旦进入坏证和变证，治疗较为棘手。湿毒疫的治疗，大黄是核心，逐邪是第一要义，邪去正安，用药宜速不宜迟。吴又可《温疫论》里讲，说这个病是一日之间有三变，变化很快。数日之法须于一日行之，确实如此。用好大黄的同时，更要观察病人的变化，尤其是在实际治疗过程中常配合了液体治疗，如果有耗气的话，及早合理地用上补气药，例如黄芪和西洋参，对于阻断疾病向重症转化，起到了重要作用。

增液化痰法。对于化痰，早期使用了许多方法，比如瓜蒌、浙贝母、黄芩等等这样一些清热化痰之法，有效果但不明显。发现存在津液不足之后，改用吴鞠通讲的增液法，有效的降低了这种痰的粘稠度，达到很好的化痰的效果。吴鞠通是增液行舟，在此是增液化痰。津液增加了以后痰自然就稀释了，稀释以后或被排出，或气化重新变成了津液，对于疾病的治疗非常有利。

开窍法。在治疗中强调泻热、开窍，早期即要重视“窍”开，这个“窍”，包括脑窍、肺窍，心包之窍，开窍是非常重要的治疗手段，比高热、烦躁、神昏均可及早用上开窍法，如用安宫牛黄丸就是开窍法的关键，“开窍”也成为危重症治疗的重要环节。

救阴。可用养阴法，或用通腑法，即承气法以急下存阴。存得一分津液，便有一分生机。

通阳，通阳不在温，而在利小便。其实是除湿之法。

益气，因为邪热伤气，所以益气是新冠病毒感染治疗中的重要方法。

固脱，邪热耗伤正气，气阴欲脱，则益气养阴，阳气欲脱，则应回阳固脱。

4.5. 杂合以治

4.5.1. 常用经典名方

祛湿为核心治疗方法，所以第一方为达原饮，达原饮是化湿法的杰出代表，是对于浊邪伏于膜原，起到开达膜原的作用，化湿之外，还有养阴、清热作用。

麻杏石甘汤、千金苇茎汤、升降散、柴胡剂，包括大柴胡、小柴胡和柴胡桂枝干姜汤、射干麻黄汤、葶苈大枣泻肺汤、宣白承气汤等都是治疗新冠常用方剂。

随着病情发展，会出现伤津、耗气、伤阳，当运用生脉散、增液汤、独参汤、参附汤以治疗。

4.5.2. 对于重症的病人，用到中药注射液

如血必净注射液，第一，它可以抗炎，第二可以调整免疫，第三它对于微血栓有很好的治疗效果。需要注意的是一定要早用、用好、用足，是早期治疗的一个非常好药物；参麦注射液，生脉注射液补气养阴，对于正气耗伤的治疗有很好效果；如果病人一旦合并肺部感染，出现了一种脓痰、黄痰、黏痰的时候，可选痰热清注射液；如果出现了黏痰，痰量非常少的情况下，可以生脉注射液合痰热清，对痰热伴随气阴耗伤的有较好地作用。

一旦患者出现一些烦躁神昏，要及早用上安宫牛黄丸。吴鞠通谈到安宫牛黄丸和承气汤的联合使用，合大黄的使用，是有道理的。治疗中强调泻热、开窍，早期即要重视“窍”开，这个“窍”，包括脑窍、肺窍，心包之窍，开窍是非常重要的治疗手段，安宫牛黄的合理使用是抗疫中抢救危重症的一个重要药物，“开窍”也成为危重症治疗的重要环节。

Acupuncture Treatment of Headache

Professor Hai Ying Cheng

Today I would like to share my experience of treating headaches with colleagues in the UK. I will be very grateful if this can be a little bit help for your clinical practice.

In modern medicine headache is considered as a symptom. In traditional Chinese medicine headache is a pattern of the disease. It is very important to differentiate the pattern of the headache based on “4 diagnosis” before planning any treatment. The conclusion may be compromised if the information collected during the diagnosis is not complete. This will have negative influence on our later treatment.

Generally speaking, not only for headache, for any diseases we need to analyse the aetiology and relative factors. As for headache, some people’s headaches are from temporary reasons, e.g. stress, tiredness, feeling sad, bad sleep, over thinking, etc. Women may have headaches during period. These are considered occasion induced headache. Although headache is considered a symptom in modern medicine, there are so many factors that may lead to headache. Therefore, it is very important in our diagnosis and treatment to take into account the reasons that cause headache and the factors that affect the severity of the headache. As an acupuncturist or Chinese medicine practitioner, we need to have knowledge of modern medicine. This is the first important aspect of pattern differentiation of headache. The second aspect is to understand the characteristics and quality of the headache. In another word, if there are other symptoms when someone has headache. For example, is the headache continuous or periodical? Is it paroxysmal or long lasting? This may indicate many other diseases. Therefore, we need to have detailed 4 diagnosis, because a lot of information can be obtained through this. This forms a foundation for our differentiation and analysis. We can subject this information to a thorough comprehensive analysis and ultimately make a sound judgment.

What factors are related to headaches? Is it related to external factors? There should be. For example, if the weather becomes colder, and we go out in the morning without drying our hair after taking a shower. This can potentially lead to a headache. This is not uncommon. For instance, if you live in a humid environment, such as some regions in southern China, which are inherently humid due to their geographical location, and you reside in a basement during the hot and humid days of summer, you may experience more noticeable headaches during such times. Some patients may describe that their headaches tend to recur or worsen under certain weather changes. So, the relationship between headaches and external factors is quite significant. In the second scenario, modern life has a fast pace. Doctors may come into contact with a lot of negative information, and his emotions can be greatly affected. On the other hand, it is related to sleep. In China, doctors sometimes have to work from 9 in the morning to 9 the next morning. Sometimes they work continuously for 24 hours. This situation can have a serious impact on sleep in the long term because the entire circadian rhythm is disrupted, so the quality of sleep is seriously compromised. So, this situation is also a significant factor contributing to headaches. When he experiences severe headaches, his sleep quality is affected, and poor sleep quality can exacerbate headaches, creating a vicious cycle. Because If intervention and treatment are not initiated early, this condition could potentially worsen over time. One common consequence could be the development of various mental and emotional disorders, such as anxiety and depression, due to these challenges. Therefore, we place significant importance on understanding the impact of emotions and sleep on patients with headaches.

Whenever I encounter patients like this, I would ask them questions such as, "Are you easily irritable?" or "Do you get angry often?" I might also inquire if they have any feelings of being wronged. Regarding sleep quality, it's important to ask specific questions. For instance, some patients might say, "I have trouble sleeping." In that case, you should inquire about whether they have difficulty falling asleep, if they wake up easily after falling asleep and can't get back to sleep, or if they experience a lot of vivid and memorable dreams during their sleep. Understanding these details about their sleep patterns is essential because they are all interconnected. Traditional Chinese medicine places great emphasis on the concept of "blood returning to the liver at night." In such cases, it's important to focus on rest and quietude. However, if you are constantly active and experiencing nightmares, some people might wake up in a state of fear or distress. This kind of situation can have a negative impact on the overall condition of headaches. Another factor to consider is mental fatigue.

When we talk about fatigue, it primarily refers to mental fatigue, although physical fatigue is not entirely excluded. However, the emphasis is on mental exertion because, according to traditional Chinese medicine theory, excessive thinking and mental effort can damage the circulation of *qi* and blood. The abundance of *qi* and blood has a significant impact on the quality of sleep. So, when patients with headaches come to see me, I often ask about their occupation and whether they have a regular day job. For instance, if they have a lot of desk work in the afternoon, such as writing, editing, or if they have professions with high levels of stress, like doctors, finance professionals, or accountant, they are all at risk for significant stress and mental fatigue.

The menstrual cycle is another important factor to consider. For example, if a patient also has uterine fibroids, they may experience very heavy menstrual flow, which are classified in traditional Chinese medicine as a form of "excessive bleeding (*beng lou*),". Over time, this can lead to a state of chronic blood loss, and some people may even develop anaemia with a haemoglobin level dropping to 10 or lower. In such cases, the symptoms of headache often occur in a cyclical manner, and the patient may explicitly mention that they experience headaches every time they have their period, and the headaches naturally subside after their period ends. These are all very common factors we encounter in clinical practice.

Different understandings of the causes and mechanisms of headaches in traditional Chinese medicine and modern medicine

We start with Western medicine because, in reality, its diagnostic methods are relatively straightforward. Many diagnostic tests, such as imaging studies and other examinations, are readily available, making diagnosis relatively efficient. For example, consider tension-type headaches. These types of headaches are closely related to a person's stress and emotions. If someone has been irritable, visibly angry or agitated, they may experience this type of headache. On the other hand, if a person has been feeling down or depressed for a few days, and they have pent-up anger they're not expressing, this situation can also lead to tension-type headaches. In such cases, even though all the medical tests come back normal, the individual may still complain of having a headache. This is a common scenario in clinical practice where the individual doesn't have an underlying organic issue but rather a functional problem. High blood pressure-related headaches are quite common, and these headaches are relatively easy to distinguish. The severity of the headache is closely related to the blood pressure levels. For instance, if a person's blood pressure is consistently at 140 over 90 or lower, they may not experience significant headache symptoms. However, factors such as fatigue, exposure to cold weather, traveling across time zones (which can disrupt the body's circadian rhythms), or staying up late can lead to blood pressure fluctuations. In these situations, headaches may worsen as blood pressure rises. It is relatively straightforward to diagnose these types of headaches when they are associated with blood pressure changes. If the individual has symptoms that are related to blood pressure fluctuations, diagnosing hypertension is not particularly difficult. Another important consideration is brain tumours. If a person experiences persistent headaches localized to one area for a prolonged period, such as one or two years or even longer, and the headaches are continuous, they may initially find some relief with pain relievers, but gradually these medications become ineffective. If the headaches always occur in one specific location, it is essential to encourage the patient to undergo early cranial imaging studies to rule out the possibility of a brain tumour. Early detection and diagnosis are crucial in such cases. In the past decade, I have encountered a significant number of patients with brain tumours, many of whom presented with headaches as their primary symptom. Some of them may attribute the headaches to fatigue, lack of rest, or various other factors and may choose to ignore them. This is a common situation in the medical field in China. Early diagnosis and timely intervention are crucial in managing these cases effectively. Indeed, when it comes to headaches caused by intracranial masses or tumours, it is crucial to make a prompt diagnosis. It is important not to resort to self-medication like Chinese herbal medicine or alcohol and not to overlook the situation. While acupuncture is known for its pain-relieving effects and is beneficial for managing various types of pain, including headaches, it can sometimes mask underlying issues. Even though it may provide temporary relief from intense pain, it doesn't address the root cause of conditions like intracranial masses or tumours. Therefore, it is essential to remember that early and accurate diagnosis is key to managing such cases effectively. Pain occurring consistently in the same location, especially if it remains unchanged for over a year or two, should raise a red flag. In such cases, it's essential to consider the possibility of underlying medical conditions, including more serious ones, and conduct appropriate medical evaluations. This is the third important aspect to be aware of when assessing persistent headaches.

Another critical consideration is viral encephalitis, whether it is meningitis or encephalitis B. Headaches associated with encephalitis typically have a sudden onset, are severe in nature, and are often accompanied by symptoms like nausea and vomiting. Some individuals may also experience changes in body temperature. In such cases, when someone presents with these specific types of headaches, it is important to conduct a medical examination promptly to rule out the possibility of encephalitis or acute brain haemorrhage. Whether it is encephalitis or brain haemorrhage, the sudden onset of severe headaches accompanied by symptoms like nausea and vomiting is characteristic of encephalitis. This is a critical condition that cannot be treated simply with acupuncture or home remedies. Immediate medical attention and proper diagnosis are essential in such cases.

As for premenstrual pain, it's a well-known condition that primarily affects women and is associated with the menstrual cycle.

Temporal arteritis is another condition worth mentioning. This condition is not uncommon, and whether it's temporal arteritis or neuralgia, it can manifest as pain in different areas. For example, when a neurological examination and cranial imaging show no tumours or other issues, but the pain persists in a specific location, it could be related to a nerve problem. This type of pain

is typically sudden, intermittent, and can be very intense when it occurs.

Elevated intracranial pressure is another condition we commonly encounter. In reality, there is a connection between elevated intracranial pressure and blood pressure, but they are not always perfectly correlated. High blood pressure does not guarantee high intracranial pressure, and *vice versa*. However, it is usually the case that when intracranial pressure is high, blood pressure does not tend to be low. Signs of elevated intracranial pressure include symptoms like neck stiffness and severe headaches. If a patient experiences these symptoms, particularly during a hospital stay, it is relatively easy to perform examinations to diagnose the condition. In summary, from the perspective of modern medicine, diagnosing headaches is not typically difficult when we focus on specific criteria and utilize modern diagnostic tools and instruments to aid in the process.

From the perspective of traditional Chinese medicine, the brain is considered the "extraordinary organ of the sea of marrow" or "the palace of the spirit." This area is seen as a central and vital part of the body. When there is an imbalance in *qi* and blood, disturbances in the flow of meridians, or issues with the connection of meridians and collaterals, it can lead to pain. Diagnosing and differentiating the underlying patterns in such cases, according to the principles of traditional Chinese medicine, can be more complex and may require a deep understanding of TCM theory and clinical experience. Inexperienced practitioners might find it challenging to make precise diagnoses and treatment recommend-dations.

Now, let us explore the characteristics and nature of headaches. In general, if a person experiences headaches accompanied by aversion to cold and chills, it is often associated with an external pathogenic factor. Traditional Chinese medicine has a clear saying, "For every portion of aversion to cold, there is a portion of superficial syndrome." This means that the presence of aversion to cold is a sign of a superficial condition caused by external factors. Whether it is a condition caused by wind-cold, wind-heat, or damp-heat, if aversion to cold is present, it typically suggests an external pathogenic factor is involved.

Another consideration is dampness-related headaches. The hallmark of dampness-related pain is that the pain might not be particularly intense, but it carries a sensation of heaviness. It feels as if something is pressing down on the head, and some individuals describe it as if there is a tight band constricting their head. This type of headache is not uncommon in clinical practice and is typically associated with damp pathogenic factors. To further assess this condition, it is essential to inquire about the individual's digestive health, their appetite, post-meal digestion, whether they experience abdominal bloating, loose stools, general fatigue, and examine their tongue appearance for additional clues.

Generally, when it comes to sharp or stabbing pain, blood stasis is often a contributing factor. This characteristic is not limited to headaches but can also be observed in other types of pain, such as stomach pain or gastric ulcers. Many patients with ulcers, for example, describe a sharp, needle-like or stabbing pain. Therefore, this feature is common in cases of pain related to blood stasis.

Another common scenario in clinical practice is when a patient presents with headaches, but there are no identifiable structural issues, their emotions are relatively stable, and their dietary habits are appropriate. However, they may suffer from poor sleep quality, and their brain might be under excessive stress due to prolonged mental exertion. In such cases, the root cause is often related to deficiency of *qi* and blood. Long-term mental exertion and other factors can contribute to this condition. Generally, the diagnosis is based on the nature of the pain to determine the underlying pattern and causes.

In broad terms, we can categorize headaches into two main types: "external" and "internal" headaches. External headaches are typically associated with the invasion of external pathogenic factors into the meridians and channels of the head. We all know that, whether it is summer or winter, people tend to be more susceptible to external pathogenic factors in the head region. For example, during the winter, even if you're bundled up in warm clothing, many people still do not wear hats, making them more vulnerable to external invasions.

Internal headaches, on the other hand, are generally associated with the internal organ systems, with a closer link to the liver, spleen, and kidneys.
Emotional fluctuations are often associated with the liver, while symptoms of dampness indicate poor digestive function of the spleen and stomach. Chronic overuse of the brain and fatigue, as well as deficiencies in *qi* and blood, are generally linked to the kidneys. It is crucial to distinguish between external and internal factors when diagnosing headaches.

For external headaches, if it is due to wind-cold, aversion to cold is typically the primary symptom. The presence or absence of body temperature changes can vary, but an aversion to cold is a key feature. If it is caused by heat pathogenic factors, in addition to headaches, there may also be a sore throat. Headaches related to dampness might have regional and climatic connections, as well as relationships with external environmental conditions.
As for internal headaches, as mentioned earlier, they are typically associated with liver *yang* hyperactivity, phlegm turbidity, blood stasis, and *qi* and blood

deficiencies. While there may be some variations in the context of traditional Chinese internal medicine, these patterns essentially cover the main causes of internal headaches.

In acupuncture and traditional Chinese medicine, a significant emphasis is placed on the meridians. When diagnosing and treating headaches, it is not only important to differentiate the pattern but also to determine the relevant meridian.

To give a general overview:

Pain at the posterior part of the head or neck is typically associated with the *Taiyang* meridian.
Frontal headaches relate to the *Yangming* meridian.
If the headache is on both sides of the head, it is related to the *Shaoyang* meridian.
Top-of-the-head headaches are associated with the *Jueyin* meridian.

Differentiating the meridians is crucial because it guides the selection of acupuncture points and treatment strategies. This combined approach, integrating pattern differentiation, meridian identification, and the four diagnostic methods, helps to establish the most appropriate treatment principles and methods, whether it involves herbal medicine or acupuncture.

When it comes to selecting acupuncture points based on pattern differentiation, it's important to note that these points are not set in stone, but generally, they align with the following relationships. When it comes to treating external pathogenic factors, whether it's wind-cold, wind-heat, or wind-damp, these acupuncture points should be considered. For wind-heat conditions, it is beneficial to combine with *Da Zhui* (Du 14) to release blood. *He Gu* (LI 4) can effectively disperse the exterior, promote ventilation, and dispel cold. Additionally, *Lie Que* (LN 7) is a specific point commonly used for headaches, particularly when they affect the head and neck. So, no matter the location of the headache, as long as it is related to external pathogenic factors, these acupuncture points can be applied.

Internal pattern differentiation for headache treatment also revolves around the circulation of meridians, particularly focusing on the *Jueyin* meridian. The *Jueyin* meridian is closely related to the *Shaoyang* meridian in the interior-exterior aspect of meridian connections. Therefore, for acupuncture point selection, you can choose *Feng Chi* (GB 20) as a proximal point, among others. You may also consider *Jiao Sun* (SJ 20) as a proximal point. For distal points, *Tai Chong* (LV 3) and *Yang Ling Quan* (GB 34) can be used. The specific points chosen depend on the individual's presentation. Is it possible to select *Xing Jian* (LV 2)? Certainly! Acupuncture point selection can be flexible, and there are many options available in classical acupuncture texts.

If dampness is the primary issue, you can consider points like *Zhong Wan* (CV 12) and *Feng Long* (ST 40). *Feng Long* is an important point for dispelling phlegm, while *Zhong Wan* is located in the middle burner, making it effective for regulating the digestion and addressing water dampness issues. For patients with cold and damp conditions, I may use fire needling in China, but this may not be allowed to use in England.

For the third scenario where stabbing pain is due to blood stasis, you can consider using ashi points for bloodletting. The location for bloodletting depends on the site of the pain. *Ge Shu* (BL 17) is an important point related to blood, and you can use it for bloodletting if necessary. However, it is crucial to thoroughly assess the patient's overall condition before deciding on bloodletting. If the patient has underlying blood-related issues or complications, bloodletting should be done with caution to prevent excessive bleeding and potential complications.

In cases of *qi* and blood deficiency, there are several acupoints you can consider using. These include *Feng Chi* (GB20) for local treatment, as well as *Qi Hai* (CV6), *Xue Hai* (SP10), *Zu San Li* (ST36), and *San Yin Jiao* (SP6). The choice of acupoints can be tailored to the specific clinical situation and the patient's individual needs.

Diagnosing and treating headaches should involve addressing the underlying causes, distinguishing between external and internal factors, and focusing on mental well-being. Many patients with headaches in China tend to seek conventional medical treatment first, and by the time they consider traditional Chinese medicine, they may have been dealing with the issue for an extended period.

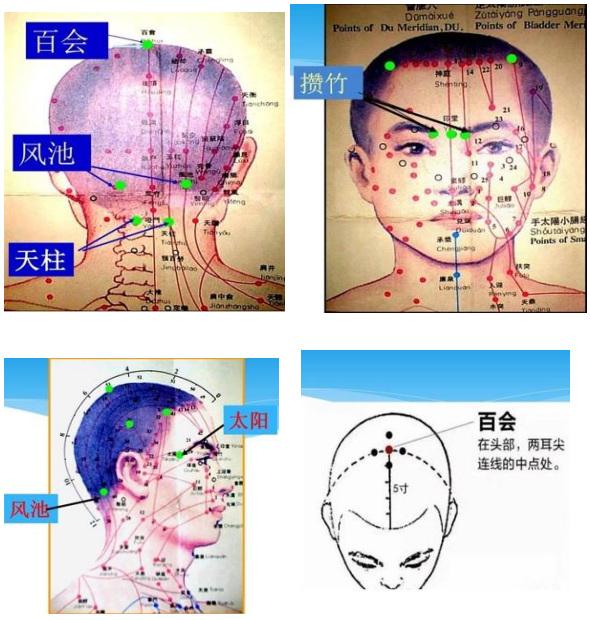
It is important to consider the psychological and emotional aspects of headache patients. Some may primarily suffer from mental health issues, while others may have sleep disturbances or even cognitive problems, such as forgetfulness and confusion. In these cases, addressing and improving their mental and emotional well-being (regulating *shen*) is crucial.

If you solely focus on pain relief, the treatment effectiveness for chronic headaches may be limited. Such headaches are usually long-standing conditions, and merely addressing pain does not offer a comprehensive solution. Many patients with chronic headaches may also have sleep disturbances, emotional issues, or even develop anxiety and depression due to their chronic condition.

In these cases, it is vital to address and improve the patient's mental well-being. Acupuncture and acupressure points like *Shen Ting* (DU 24), *Shen Men* (HT 7), and *San Yin Jiao* (SP 6) are well-known for their calming effects and can be helpful. Furthermore, if you

find that the patient's condition involves imbalances in various organ systems, considering acupuncture points like *Ba Hui* (Eight Confluences) can also be beneficial. For example, *zang hui Zhang Men* (Viscera organs meet at *Zhang Men*, LV13). The depth and angle at which you use these points are essential for their effectiveness. In acupuncture, there are numerous acupoints available, and to enhance the effectiveness of the treatment, you may rotate or choose different points at times. For example, if you are using a particular acupoint in one session, you might select different ones in the next session. However, there are some key acupoints like *Lie Que*, which are valuable for treating various types of headaches. You can use Lie Que for most headache cases, and it's a correct choice. In certain situations, such as headaches related to the Liver meridian or vertex pain, besides *Bai Hui*, selecting Gan Shu (BL 18) acupoint is also a suitable and correct option.

In cases of *qi* and blood deficiency, you have flexibility in choosing acupoints. For example, you can select *Xin Shu* (BL 15), *Pi Shu* (BL 20), *Shen Shu* (BL 23), and *Qi Hai Shu* (BL 24). The choice of acupoints can be quite flexible, and it depends on your skill and understanding of these points. From my personal experience, when dealing with conditions like *qi* and blood deficiency, phlegm stagnation, or blood stasis, I always use fire needling, followed by specific acupuncture techniques, and then proceed with a differential diagnosis.



According to the above charts, if the pain is in the occipital region (back of the head), you can focus on the acupoints listed here. However, there are many more acupoints to choose from in the back region. The back-*shu* acupoints of the *Du Mai* (Governor Vessel) run along the spine, and the Bladder Meridian's lateral line also passes through here, providing numerous options. So, can you choose *Da Zhu* (GV14) or *Feng Men* (BL12)? Absolutely. As for the distal points, why use *Hou Xi* (SI 3) Because *Hou Xi* connects to the *Du Mai* and serves as a convergence point for the eight extraordinary vessels. Therefore, once you master these specific acupoints, you have many back-*shu* points to choose from.

I disagree with selecting too many acupuncture points in one area. I have indeed seen cases in China where many needles were inserted into a single, simple area of the head. This not only indicates a lack of knowledge but also leads to less effective treatment. This is the situation with the *Tai Yang* meridian. As for the Yang Ming meridian's points, there are also many, primarily along the Stomach meridian. The only issue is the *Tou Wei* point, which indicates its connection to the pathway of the Stomach meridian and is categorized as part of the Stomach meridian. However, its actual location is within the *Shao Yang* position. Therefore, for this acupuncture point, it can be selected for *Yang Ming* headaches, but it can also be chosen for migraine headaches, as its meridian pathway is documented in ancient texts but doesn't need to be strictly adhered to. Both *Yang Ming* and *Shao Yang* headaches can be treated. If it is not a *Shao Yang* headache but a forehead pain, can you use *Yin Tang* instead of the 4Tou Wei point? Of course, you can.

Everyone knows that originally, *Yin Tang* belonged to the extraordinary points, but in recent years, some experts in China have reclassified it as part of the Governing Vessel (Du Mai). Therefore, the previous 361 acupoints have now been updated to 362. This change is because *Yin Tang* is inherently located along the pathway of the Governing Vessel, but our ancestors initially categorized it as an extraordinary point.

There are numerous acupuncture points that can be selected along the *Shao Yang* meridian. Some students may find the pathway of the Gallbladder meridian confusing because it runs along the lateral aspect of the head, winding around the ears and face. With such a diverse pathway, there are many options for acupuncture points. As for the distant upper limb points, you can select *Wai Guan* (SJ 5) and *Zhong Zhu* (SJ 3), and for the lower limb points, *Qiu Xu* (GB 40) and *Xia Xi* (GB 43) are also viable options. In general, it is a good practice to choose one point near the affected area and one point further away, combining local and distal points for a comprehensive treatment approach.

One point directly targets the affected area, while the other follows the meridian's pathway. In general, when we talk about points in the distant extremities, their therapeutic range is broader. This aligns with the theory of "treating the root to alleviate the branch," as mentioned in the classics of Traditional Chinese Medicine. The acupuncture points at the distal extremities are considered our "root" and "source," while the local points at the affected area are equivalent to the "branch" and "manifestation." Therefore, combining root and branch treatments can often yield more favourable results for patients.

Finally, let's talk about the *Bai Hui* point. *Bai Hui* is an acupuncture point along the Governing Vessel. In general, if a patient is experiencing vertex (crown of the head) headaches, *Bai Hui* can be used, as well as *Si Shen Cong* (EX-HN1). Approximately 50 years ago, there was a teacher who, in treating patients with headaches, especially those caused by hypertension, would insert a needle into the *Bai Hui* point and not remove it, allowing the patient to take the needle home. His intention was to leverage the prolonged effect of acupuncture. However, in today's clinical practice, doctors typically do not employ this approach.

For vertex headaches, both *Bai Hui* and *Si Shen Cong* can be used. If the headache is related to conditions like hypertension, you can indeed perform bloodletting at *Bai Hui*, and *Si shen Cong* can also be considered. In cases like this, although it may not be stabbing pain, bloodletting can have a meaningful impact on lowering blood pressure. Additionally, when addressing pain caused by hypertension, there is the option of using the "*Jiang Ya Gou*" point. Bloodletting at *Jiang Ya Gou* has been observed to have a noticeable effect in clinical practice, particularly in cases with high blood pressure, especially above 160 mmHg. After bloodletting, measuring blood pressure again 20 minutes later can show a reduction of 10-20 mmHg, which is highly effective. However, it is essential to ensure that the patient does not have any blood disorders before considering bloodletting as a treatment option. Bloodletting should not be used if the patient has a blood disorder.

In China, there is a wide variety of acupuncture techniques and needle types available. However, in the UK, there may be certain legal restrictions, which is why filiform acupuncture needles are predominantly used. Filiform needles serve as a foundation and can be applied to treat various types of headaches.

In China, various needle techniques, such as bloodletting with bee venom acupuncture for hypertension-related headaches, are employed. For headaches characterized by deficiency, severity, or hidden pain, plum blossom needling can be used for tapping and stimulation.

Lastly, let's consider moxibustion. For *Yang Ming* headaches, you can moxibustion at *Yin Tang*. If there's a dull ache at the vertex, moxibustion at *Bai Hui* can be beneficial. In cases dominated by dampness, moxibustion at *Zhong Wan*, *Feng Long*, and *Zu San Li* can be used. These points all have excellent effects on strengthening the spleen and eliminating dampness. These approaches, when combined, can yield positive results.

In China, there is also the practice of retaining acupuncture needles. For individuals with minor symptoms, mild, deficiency-type headaches who need to maintain their regular work schedules, visiting a hospital for treatment may consume too much time.

In China, acupuncture clinics often have high patient volumes, with a starting point of around 1,000 patients per day in some cases. In such situations, acupuncturists can select and teach patients how to retain acupuncture needles for approximately 24 hours. With some basic knowledge, the technique is not overly complicated. For patients with no severe underlying conditions, mild symptoms that don not significantly impact their daily life or work, this method can be effective.

-----*Continued from the18th page*

Clinical treatment key points: Chinese acupuncture intervention for such diseases can be implemented at any stage after the diagnosis of the disease.

- Prior to the onset of Western medical system treatment, it can enhance the patient's physical condition to better adapt to subsequent conventional Western treatments.
- Parallel to conventional Western treatments, it improves the patient's physical fitness, helping them better accept Western medical treatments, and aids in controlling the side effects of cancer treatment.
- During conventional Western medical treatment, it improves the patient's physical fitness for a speedy recovery.
- Upon completion of conventional Western medical treatment, traditional Chinese medicine aims to promote the comprehensive recovery of the patient, improve clinical symptoms, and prevent tumour recurrence.
- For end-stage patients, it alleviates symptoms and enables dignified living during the final stage of life.

3. Principles of Clinical Diagnosis and Treatment in Traditional Chinese Medicine:

Fully utilize modern medical diagnostic data to accurately determine the direction and intensity of intervention in traditional Chinese medicine.

Promote the recovery of diseases where traditional Chinese medicine excels, increasing their short-term cure rate.

Identify and capture the advantageous disease stages of organic diseases, actively and effectively intervening at the appropriate time. For areas where traditional Chinese medicine is not advantageous, rationally recognize its place in mainstream medicine.

For diseases where traditional Chinese medicine serves as a supplementary treatment, establish long-term treatment plans and implement phased treatment goals.

Discussion on Utilizing TCM as Preferential Treatment of Diseases in the UK

Dan Jiang

Over the last few decades, TCM has become one of the most effective complementary and alternative therapeutic approaches in the UK. This partially because the existing shortcomings of modern Western medical treatment methods have led to a wide acceptance of complementary alternatives. Traditional Chinese medicine itself possesses a comprehensive theoretical framework, objective diagnostic methods, natural medicinal resources, a rich array of treatment skills, and effective diagnostic and treatment models. It effectively complements modern medicine, establishing a necessary position for acupuncture and herbal medicine in the maintenance of human health.

Due to the different healthcare systems, in the Western context, traditional Chinese medicine cannot be combined with Western medicine or any Western medical treatments. Therefore, the treatment principle of overseas Chinese medicine is to integrate various traditional Chinese medicine therapies in the hope of achieving greater therapeutic effects. As it operates outside the mainstream medical system, achieving short-term effectiveness and objective effectiveness in clinical Chinese medicine treatment is essential.

Traditional Chinese medicine (TCM) has, in the past few decades, established its foothold, survival, and development in the UK. There should be objective principles behind this. Leveraging the greatest advantages of TCM, identifying the diseases where TCM excels in treatment, employing the best diagnostic and treatment models of TCM, and swiftly obtaining therapeutic effects in TCM should be at the core of TCM's survival and development.

1. Diseases or Medical Conditions in which Traditional Chinese Medicine Excels in Diagnosis and Treatment

Definition: Diseases or medical conditions that fall within the realm of TCM where there is comprehensive understanding of TCM theory, definite clinical efficacy in TCM practice, and the ability of TCM treatment to produce rapid and complete recovery, are categorized as diseases or medical conditions in which Traditional Chinese Medicine excels in diagnosis and treatment.

1.1 Novel Coronavirus, Various Viral Infections, and their Sequelae:

Basis of Efficacy: Several traditional Chinese medicine prescriptions exhibit relatively precise antiviral effects. Therefore, for the novel coronavirus, Epstein-Barr virus, influenza virus, and various viral infectious diseases, traditional Chinese medicine is highly effective in eradicating the viruses. Consequently, it can effectively treat various viral infection-related conditions. Identifying traditional Chinese medicine antiviral prescriptions that demonstrably show efficacy in clinical application and researching their mechanisms of action is the correct path for today's research on traditional Chinese medicine.

Clinical Treatment Features:

- Select appropriate traditional Chinese medicine formulas to expel pathogenic factors according to the nature of the infection. For instance, use *ma huang tang* to disperse wind and expel cold, or *huo xiang zheng qi san* to dispel dampness and release the exterior. This aids in rapidly achieving the efficacy of resisting and eradicating the virus.
- The core of effective treatment in traditional Chinese medicine lies in the use of well-designed herbal prescriptions. Proper combinations of Chinese herbs can address the inadequacy of herbal strength and pinpoint specific treatment targets for particular viruses or pathological conditions.
- When encountering pathogenic factors, prioritize expelling these factors. "Where there is pain in the muscles, there is the presence of pathogenic factors" - this principle of differentiating pathogenic factors from healthy energy is a clinically applicable principle of differentiating the pathogenic factors from the healthy energy in the body.
- Emphasize syndrome differentiation for treatment, expel pathogenic factors while supporting the body's healthy energy. Even in cases of externally contracted diseases, focusing on addressing the root cause is an important aspect that facilitates the overall recovery of the patient.

1.2 Psychological and Emotional Abnormalities:

For conditions like anxiety, depression, stress, post-traumatic stress disorder (PTSD), and sleep disorders, acupuncture can effectively adjust the intracranial disordered electrophysiological conditions, improving psychological and emotional abnormalities. For

individuals who developed psychological abnormalities during the COVID-19 period, leading to persistent long-term conditions, combining acupuncture with traditional Chinese medicine can yield more significant therapeutic effects.

1.3 Endocrine Disorders and Various Types of Infertility

Due to the role of TCM in adjusting endocrine imbalances, the efficacy of acupuncture in promoting the body's self-healing mechanisms, the replenishing function of Chinese herbs on vital energy, blood, and bodily fluids, and the comprehensive adjustment and rehabilitation treatment of the body, traditional Chinese medicine has shown good therapeutic effects on infertility conditions and various gynaecological and reproductive system-related ailments. Clinically, this approach can lead to a favourable rate of successful childbirth.

Clinical Treatment Characteristics:

- Applying traditional Chinese acupuncture adjusts the disrupted menstrual cycle to its optimal state based on the cyclical changes. It serves as an objective standard for the effectiveness of Chinese medicine, aiming to optimize the functional state of individuals at each physiological stage - a fundamental theory for promoting conception in traditional Chinese medicine.
- Using specific acupuncture techniques and methods to delay or induce ovulation based on the distinct menstrual disorder conditions during the ovulation period is the core technique for managing menstrual irregularities resulting from endocrine imbalances.
- Tailoring appropriate treatment plans and methods based on infertility-related gynaecological conditions, traditional Chinese differentiation, individual differences, and fertility plans.
- Male infertility closely related to infertility, such as abnormal sperm, is also an advantageous area for traditional Chinese medicine treatment.

1.4 Eczema and common skin conditions

Eczema and atopic dermatitis (AD) are common skin conditions in the UK. For some stubborn and severe cases of AD, modern Western medicine's topical steroid treatment combined with short-term oral medication may not effectively control the condition fundamentally, leading to a sad scenario where some patients experience lifelong skin abnormalities. However, internal administration of Chinese herbal medicine, which focuses on treating the entire body and regulating the immune system, has played a decisive role in the complete cure of such conditions.

In the early 1990s, Dr. Luo Dinghui played a significant role in promoting the spread of traditional Chinese medicine in the UK, particularly in this field. Dr. Atherton's team conducted double-blind controlled studies on adult and podiatric groups with atopic eczema treated with Chinese herbal medicine based on the treatment provided by Dr. Luo Dinghui. Their one-year follow-up observations objectively evaluated the diagnostic and treatment efficacy of traditional Chinese medicine. Their four research reports were published in reputable international medical journals, contributing to the widespread dissemination of the efficacy of traditional Chinese medicine in treating skin conditions in the UK and around the world.

Clinical Treatment Characteristics:

- For severe, widespread skin conditions, the use of orally administered Chinese herbal medicine for systemic regulation is a major feature of Traditional Chinese Medicine (TCM). It effectively supplements the limitation of modern Western medicine, which predominantly relies on local steroid applications. In cases of immune disorders caused by congenital genetic defects, internal administration of Chinese herbal medicine plays a significant role in repairing and regulating the immune system to restore its normal functionality.
- Patients with chronic, long-term skin conditions often exhibit systemic symptoms such as mental stress, anxiety, and insomnia. Acupuncture intervention can effectively treat these symptoms.
- Compared to topical steroids, externally applied Chinese herbal medicine is milder and can be very effective when used appropriately. Topical steroid medications in Western medicine are effective for acute skin lesions. Additionally, the combined intervention of Chinese herbal medicine with Western medicine's topical steroids can have a synergistic effect in treatment.

1.5 Various Pre-Clinic Conditions:

Conditions such as fibromyalgia (FM), chronic fatigue syndrome (Myalgic Encephalomyelitis - ME), irritable bowel syndrome (IBS), and others are commonly seen in the Western world. Western medicine often fails to identify specific organ pathologies or corresponding pathological changes indicating organic diseases in these conditions, thus categorizing them as pre-clinic conditions.

In the UK, Jiang & Franks applied traditional Chinese medicine's theory of Warm Diseases from a Dampness perspective to establish a diagnostic model for Myalgic Encephalomyelitis (ME). Over more than two decades of clinical practice, this diagnostic approach for ME was validated and found to be correct and effective. Following the recent outbreak of the COVID-19 virus, there are more cases of chronic post-viral fatigue. According to the Dampness theory in traditional Chinese medicine, the elimination of dampness and facilitating detoxification while supporting the body's immune system is often the correct path for addressing such conditions.

On the other hand, Fibromyalgia (FM) represents a different stage or pattern within the framework of traditional Chinese medicine compared to ME. FM demonstrates a state where the pathogenic factors are still intense, and the flow of vital energy remains stagnant. The condition often shows a dominance of pathogenic factors, either as a combination of excess and deficiency or as a blockage of energy due to dampness. Chronic fatigue syndrome, within the theoretical framework of traditional Chinese medicine, falls into the category of a predominant deficiency of vital energy. With the appropriate application of traditional Chinese medicine's principles and methods, improvements can be achieved in both ME and FM.

Clinical Diagnostic Features:

- Pre-clinic conditions often manifest as symptoms due to abnormalities in the circulation and fullness of *qi* in the meridians before actual organ damage occurs. In more developed countries with higher living standards and stronger vitality, the likelihood of such conditions emerging and being sought for treatment is higher. Acupuncture and traditional Chinese medicine precisely target this advantage. Active and effective intervention to swiftly improve the circulation of *qi* and blood can ameliorate clinical symptoms and prevent the onset of organ damage.
- For pre-clinic conditions, acupuncture treatment is particularly necessary, aiming to rectify the disorder and irregularities in the circulation of Qi and blood in the meridians, thereby promoting the body's self-adjustment and self-recovery mechanisms.
- The replenishing effects of Chinese herbal medicine on *qi*, blood, *yin*, and *yang* are essential for pre-clinic conditions. This is a crucial treatment method that modern Western medicine lacks for pre-clinic conditions.

1.6 Pain-Centric Disorders in Various Soft Tissues, Muscles, and Myofascial Injuries:

The main pathological changes resulting from various acute and chronic injuries include nerve, myofascial, and soft tissue compression, leading to excessive contraction of the affected muscles. This contraction is responsible for the local pain and functional limitations observed. Acupuncture, especially modern specialized acupuncture techniques evolved from traditional acupuncture, such as subcutaneous needling (FSN), motion acupuncture, Pi needling, round-edged needling, and others, incorporate modern anatomical concepts. This integration makes the direction of traditional acupuncture treatment more precise, the treatment intensity more accurate, the clinical efficacy more satisfactory, and significantly enhances the improvement of pathological conditions, greatly boosting the therapeutic effects of traditional acupuncture.

Clinical Diagnostic Features:

- Pain is one of the most intolerable clinical conditions, and the toxic side effects of prolonged analgesic drug use are difficult for people to accept. Therefore, alleviating, eliminating, and improving pain has positioned acupuncture and traditional Chinese medicine as effective treatment methods to showcase their advantages.
- Treating soft tissue injuries, as well as joint, skeletal, and visceral conditions, starting from the perspective of muscles, myofascia, and tendons, is an advantageous diagnostic and treatment approach in Chinese medicine. This approach also forms the effective strategies for acupuncture treatment to address pain.
- Clinical treatment should be specifically tailored based on the patient's individual symptoms, traditional Chinese medicine pattern identification, and the patient's constitutional characteristics. The most appropriate and suitable treatment intensity should be determined, providing each patient with the most suitable and optimal treatment method.

2. Conditions where Traditional Chinese Medicine Shows Advantageous Stages of Treatment:

In some clinical conditions, especially critical, complex, and potentially fatal diseases with a high mortality or disability rate, traditional Chinese medicine might have an overall lower therapeutic effect compared to mainstream medicine based on modern medical pathology, physiology, and treatment characteristics. It's crucial to rationally recognize and determine the advantageous stages of treatment in Chinese medicine for such conditions:

2.1 Early stages of common organic pathologies:

For instance, Multiple Sclerosis (MS) is a neurological

disease more prevalent in the West, characterized by the primary pathological changes of demyelination in the central nervous system after viral infection. Nerves without myelin lose their normal physiological function. Muscles governed by these nerves may experience spasms, atrophy, and the loss of normal motor functions, leading to limb paralysis.

In the early stages of diseases like MS, where limb weakness and paralysis have just begun, timely intervention with acupuncture and traditional Chinese medicine can swiftly control the congestion and edema of the affected motor nerves, effectively managing the demyelination changes in the motor nerves. This intervention can improve or even completely control the muscular atrophy state in patients. The report by Jiang in the UK on the treatment of 20 MS patients using acupuncture and traditional Chinese medicine is a persuasive experiential reference. Acupuncture and traditional Chinese medicine treatment can rapidly control acute onset in patients, restoring normal function. It can also aid patients experiencing a recent recurrence of limb paralysis of chronic disease, while it is completely ineffective in cases of long-standing chronic conditions.

Clinical Key Points:

For some organic pathologies, the intervention of acupuncture and traditional Chinese medicine should ideally occur in the early stages, particularly during the active phase of the disease. Early intervention to leverage the advantages of acupuncture and traditional Chinese medicine can yield significant clinical effectiveness. However, in the case of stable chronic conditions, the efficacy of acupuncture and traditional Chinese medicine is quite limited.

2.2 Recovery or Quiescent Phase of Common Organic Pathologies:

For conditions such as migraines, strokes, and cerebrovascular diseases, strokes and cerebrovascular diseases are the primary focus of acupuncture and traditional Chinese medicine in China. In the West, the initial stages of these diseases are often severe, requiring hospitalization. Consequently, interventions in traditional Chinese medicine typically occur during the residual or aftermath phase of these illnesses. At this stage, the injury to the affected tissues has surpassed the optimal treatment period, making recovery more challenging.

However, acupuncture treatment, especially using scalp and electroacupuncture, providing stimulation to the affected area, may establish collateral circulation around the damaged areas of the brain. This could potentially aid in the partial restoration of the original motor functions. Therefore, acupuncture and traditional Chinese medicine treatment can still hold significance at this stage.

Clinical Treatment Key Points:

During periods of stability or recovery from an illness, establishing a consistent acupuncture and traditional Chinese medicine treatment plan is crucial. This plan aims to regularly improve and enhance the overall functional condition of the patient, enhance the quality of *qi* and blood circulation, reduce the frequency of disease recurrence, or facilitate gradual recovery of the affected limbs. Such treatment should encompass short-term goals and long-term plans to ensure the positive impact of acupuncture and traditional Chinese medicine treatment.

2.3 Complications of Common Organic Pathologies:

For instance, cardiovascular diseases. Western medicine excels in the treatment of these conditions, effectively managing angina, reducing hypertension, controlling various heart failures, and dissolving blood clots through medications and microvascular endoscopic surgeries.

However, patients seek assistance from traditional Chinese medicine mainly due to complications that Western medicine might have overlooked, misdiagnosed, or not completely controlled after treatment. Examples include episodic arrhythmias, mild angina, intermittent high blood pressure, or patients unwilling to use Western medication for high blood lipid levels. Appropriately integrating traditional Chinese medicine can serve as an effective supplement to Western medicine, enabling patients to achieve a higher standard of recovery.

Clinical Treatment Key Points:

Focus on the Western medical diagnosis of the patient's condition. If a patient has been misdiagnosed in Western medicine, it's advisable to suggest that the patient promptly consult their GP or a specialist for further examination. For conditions that Western medicine has not entirely controlled, integrating traditional Chinese medicine treatment should maintain synergy with Western medical treatment.

2.4 Common Organic Diseases:

For conditions where Western medicine treatments have improved but not completely alleviated clinical symptoms, or cases where conventional Western treatments exist but Chinese medicine offers essential supplementary therapies:

For instance, in cancer treatment, even with the current Western medical protocols involving surgery, radiation, chemotherapy, and other advanced treatment modalities for tumours, Chinese medicine offers unique and crucial therapeutic approaches. The role of Chinese medicine in cancer treatment focuses on restoring the body's immune responses that lead to the development of tumours, improving the pathological environment favourable to

tumour growth and spread, controlling the clinical symptoms resulting from the tumour or Western medical treatment, enhancing the patient's overall physical condition, and allowing dignity in the final stages of life.

The role of Chinese medicine in cancer treatment is evident in improving the patient's quality of life, reducing cancer's impact, mitigating immunological side effects, ameliorating the toxic effects of radiation and chemotherapy, managing postoperative complications, and promoting recovery post-surgery. It also addresses cancer-related pain and improves other cancer symptoms and complications. There is substantial clinical and research evidence supporting these aspects.

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ANNOUNCEMENT

The 2024 World Federation of Acupuncture-Moxibustion Societies Annual Meeting and International Acupuncture Academic Conference

Join us for the 2024 International Acupuncture Academic Conference in the United Kingdom, hosted by the Association of Traditional Chinese Medicine & Acupuncture (ATCM) UK and the British Medical Acupuncture Society (BMAS). The conference will be held in the U.K. in October 2024, focusing on "Acupuncture Research and Clinical Applications."

Key Details:

- **Date:** October 2024 （TBC）
- **Theme:** Acupuncture Research and Clinical Applications
- **Contacts:**

  Jessie Wang (info@atcm.co.uk)
  Qiao Huijun (office@wfas.org.cn)

Experts and scholars in acupuncture, clinical practice, research, education, and related fields are invited to actively participate. Explore the latest research findings and future directions in Traditional Chinese Medicine and Acupuncture.

For inquiries, please contact us. We look forward to your participation.

2024 London Conference Organizing Committee

头针临床应用中的关键点

刘会安

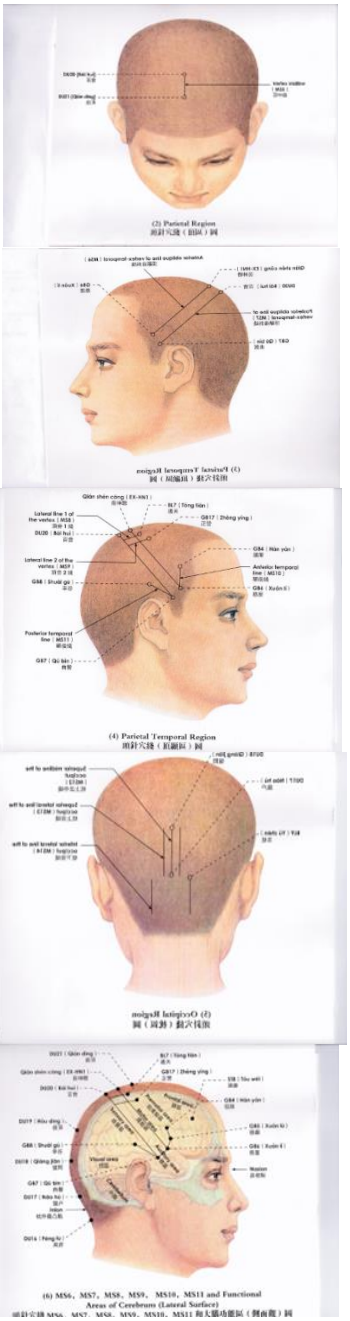
简介

头针疗法，又称头皮针疗法，简称头针。做为现代微针疗法的重要组成部分之一，它是在中国传统针灸学基础上，结合现代医学脑皮层功能定位并参考生物全息理论而创立的一门针刺疗法。临床上是通过使用豪针刺激头部的特定区域或穴线来达到治疗疾病目的。

头针早在 20 世纪 50 年代就有人提出并开始应用，但真正在临床上推广则是在 70 年代以后。历经 70 多年的临床观察与研究,证明头针不仅方法简便安全，而且临床疗效好,适应症非常广泛,尤其对于脑组织损伤所引起的多种疾病有独特的疗效。

目前临床主要应用的， 具有代表性的头皮针理论有三种： 《头皮针穴名标准化方案》、焦顺发头针穴名体系和方云鹏头皮针体系三家。其中《头皮针穴名标准化方案》为目前国际上通用的标准，但对初学者来说，掌握上有一定难度。而实际临床上，以焦顺发所提出的头皮针理论影响较大，于 1971 年出版了《头针疗法》，并在 5 年内很快在全国 20 多个省市得到推广和应用.除此之外，还有方云鹏、汤颂延、于致顺、朱明清、张明久、林学俭、刘炳权、王新明、俞昌德及山元敏胜等诸多的头针流派。[1]

《头皮针穴名国际标准化方案》于 1983 年经过各路专家讨论，由全国头针研究协作组组长陈克彦起草了《中国头皮针施术部位方法标准化方案》，并在 1984 年 5 月在日本东京召开的世界卫生组织西太平洋地区穴名工作会议上正式通过，定名为《头皮针穴名国际标准化方案》,由 WHO 于 1991 年进行了公开颁布，并进行全世界推广。其标准线是以中医学理论为基础，按照分区定位，经上选穴，并结合传统刺法中透刺方法的原则来进行划分。标准线与经络、穴位、脏腑有密切联系。该方案分为 14 条标准头皮针治疗线，分属 4 个区，该方案既融合了部分大脑皮层的功能定位，同时又体现了中医针灸经络理论的特点。[2]



[3]

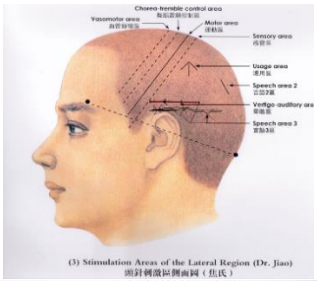
焦氏头皮针

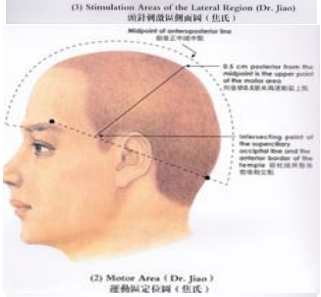
焦氏头针是最早的头针之一,同时也最为盛行。

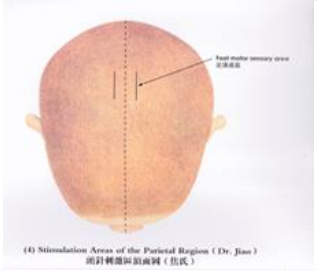
焦顺发先生于 1970 年发明“头针”，1971 年出版《头针疗法》。1982 年焦顺发的头针轰动了世界，WHO 承认头针是中国发明的，要求在世界各国推广应用。荣获了 1986 年度国家中医药重大科研成果甲级奖,后在 148 个国家推广应用。焦氏头针曾被编写在高等教育中医药类规划前五版教材《针灸学》中 。《头皮针穴名国际标准化方案》主要是在焦氏头针体系的基础上制订的，其中的 14 条标准头皮针治疗线中有 8 条治疗线与焦氏头针的位置一致或接近。

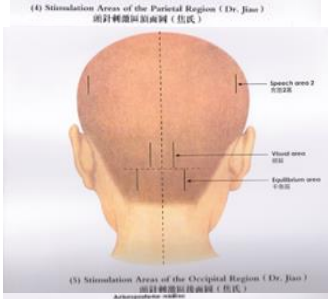
焦顺发先生是从针灸学募穴的理论基础上得到启发，募穴为脏腑经气聚集的地方，大多募穴非本经腧穴，但分布在脏腑相对应位置，与脏腑距离很近。同理，焦老认为治疗脑源性疾病，其病灶在脑，可取与脑部相近的腧穴，即头穴。

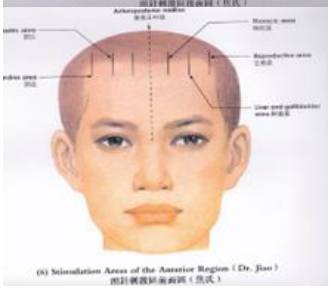
焦氏头针因为， 头针穴位是代表大脑的潜在功能区域。头皮针的原理是通过针对头皮区域刺激大脑相应的功能区，促进其功能的恢复和增强。因此头皮针通常选择线或面,而不是传统的单穴。焦氏头针刺激区大部分是大脑皮层功能定位的对应头皮区，如中央前回是对侧肢体的运动中枢，对应的头皮部位即为运动区;而中央后回是主管对侧肢体的感觉中枢， 因此对应的头皮部位即为感觉区;以此类推，先后共设立了共 19 个刺激区：运动区、感觉区、舞蹈震颤控制区、血管舒缩区、精神情感区、晕听区、言语二区、言语三区、运用区、足运感区、视区、平衡区、制狂区、鼻烟口舌区、胸腔区、胃区、肝胆区、生殖区和肠区。[4]











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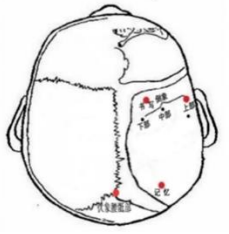
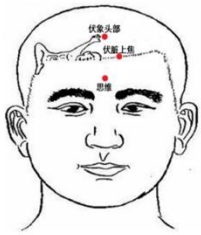
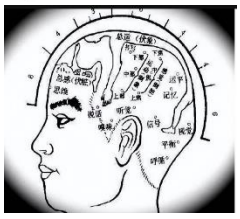
方氏头皮针

1968 年方云鹏先生在陕西省蓝田县工作时第一次提出，并在当地推广，被誉为“蓝田头针”，在陕西省推广应用。1976 年，方云鹏先生考虑到头针的进针部位以头发覆盖的头皮部为主，正式将头针治疗体系命名为“头皮针”。1978 年，方氏头皮针荣获全国医药卫生科研成果奖。1982 年，方云鹏先生主编的《头皮针》专著作为医疗卫生技术资料由陕西科学技术出版社出版。1983 年，方氏头皮针纳入《头皮针国际化标准方案》向全世界推广。

方氏头皮针是在现代医学脑皮层功能定位基础上结合全息与八卦、洛书等理论相结合， 提出里“伏象” 、 “伏脏”、 “倒象”、“倒脏” 的概念， 另外还设立了 11 个穴区。方云鹏先生不仅所创立了头皮针， 经过其多年的临床实践还创造了手象针、足象针等疗法， 极大地丰富了微针疗法的内容。[5]







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头针在现代微针疗法中的重要地位

与其它微针不同的是头针有其内属脏腑-脑:

在 2000 多年前，古代医家已在经络理论上认识到头部的重 要性，认为“头为精明之府”。《灵枢 •邪气藏府病形》篇 中记载：十二经脉，三百六十五络，其血气皆上于面而走空窍。 《景岳全书》中也说：“五脏六腑之精气，皆上升于头。”

与全身的联系更加紧密:

在我们的传统针灸的基本理论中，与头部相通的经脉有很多， 如督脉、膀胱、三焦、胆、肝、胃、阳维脉与阳跷脉，还有经别等。所以头上的穴位几千年来一直被用来治疗不同的疾病。而分布在头部的 14 经穴位就有 109 个。

头针流派很多，但其理论目前主要可归纳为以下三个方面:

传统中医理论关于脑与经络的联系;

以现代医学脑皮层功能定位为基础， 按照其在头皮上的投射区来制定相应的穴区;

结合生物全息理论，传统的八卦，洛书， 五运六气等理论相结合，设立了相应的穴区， 因而创立了诸多不同的头针流派。

目前有关头针作用的机理研究有以下几个方面:

血液动力学;

血液流变学;

脑电生理学;

生物化学和免疫学等。

在今年 9 月 10 日线上举办的“头皮穴区刺激技巧与机制国际讨论会”上， 金观源教授强调了头皮针的神经反射学说，并提到了头针治疗脑病的抗炎机制和促神经功能连接与补偿机制。同时对头针在躯体疼痛病治疗机制方面也进行了论述。最近其论文“脑血流量的神经控制-头皮针治疗脑病的科学基础”发表在在《神经科学前 沿 (Frontiers in Neuro-science)》杂志上。

总之，头针治疗脑病的机制可以是很多方面的， 但它们都离不开局部脑血流量的改善。因此了解脑血液的供应来源成为临床精准选取穴区的关键之一。

临床选穴方法与要点

根据头针的基本理论与已知相关的作用机制指导临床选穴:

根据疾病在脑相关的定位进行选取相对应的穴区;

按照脑功能定位区域相关的供血来源选取穴区;

颈内动脉系统: 大脑前动脉，大脑中动脉(皮层支主要 8 条和中

央支(外侧豆纹动脉)，眼动脉。

椎基底动脉系统： 椎动脉(小脑下后动脉,脊髓上动脉) 基地动脉(小脑下前动脉,桥脑动脉,小脑上动脉,大脑后动脉)。

脑供血的两大系统

人体大脑组织占体重的百分之 2～3%，而脑组织所需要的血液供应量是很大的，通常占人体供血液的百分之 15～20%。

颈内动脉系统：承担大脑前 2/3 及部分间脑的供血。

椎基底动脉系统：承担大脑后 1/3 及部分间脑以及小脑和脑干的血液供应。

能够帮助改善脑供血的其它疗法

针刺颈项部位的腧穴以疏通局部的经脉气血：如人迎、风池、完骨、天柱、颈夹脊等。

运用能够增加全身血液供应和提高血液质量及改善血液流变学指标的体针以及中药。 如人中、内关、中脘、气海、关元、足三里、丰隆等。

临床常见的失语症的辨析与选穴

运动性失语

这类患者能听懂别人说话、能发音，但说不出完整的话或说话不连贯。病人表现很着急。 提示优势半球的大脑皮层额下回后部(Broca‘s area) 的病变。

选穴区: MS10， 焦氏的运动区下 2/5(语言一区)， 方氏的说话区。

感觉性失语

患者能说能听，但听不懂别人说的话，表现为所答非所问，用词和语法紊乱。偶尔能说对是通过看对方说话时的情形或口型来判断出的。其病变部位是在优势半球大脑皮层的颞上回、 颞中回的后部与缘上回（顶下小叶的一部分）。

选穴区： MS11；即焦氏的语言三区；方氏的信号区。

命名性失语

患者以命名不能为主要特征。看到一件常见东西后，如铅笔、手电筒等，不能说出事物的名字。可以叙述其功用，但不能用名词来表达事物。 常常表现为非常的不屑一顾。命名性失语受损部位为大脑优势半球的枕叶和颞叶交界区即由角回或颞中回和颞下回后部。

选穴区：MS9； 焦氏的语言二区；方氏的运平区。

构音障碍

通常是由于主管语言构音器官肌肉麻痹、收缩力减弱或运动不协调所致的语言障碍。表现为言语含糊不清，语速缓慢等。可见于大脑、小脑 与延髓的病变。 如假球麻痹，球麻痹， 椎基底动脉出血或梗塞等。

选穴区：以改善椎基底动脉供血为主。MS14； 即焦氏的平衡区；方氏的平衡区。同时根据发病的定位加用相关头皮穴区，并可结合廉泉，风池， 完骨，天柱等颈项部腧穴。

减少针刺疼痛的关键

一般选用好质量 0.25-0.30 号 40mm-60mm 长的毫针。

具体方法有两种，飞针刺入法和快速推进法。我个人使用的是快入缓推法。初学者也可用缓入缓推的方法。入针前用指甲反复掐按入针点,之后在把握好角度与方向的情况下缓缓刺入,并向前推针。推针时以手感顺畅无阻力为最佳。

关键是入针时角度要小，一般要小于 25 度夹角,并且要根据穴区的不同及患者颅骨的具体形状而调整具体的入针角度。往往在入针后推针时让针尖向头皮表层的方向运行为佳。

术者要在施术前做到神安心静，精神集中。刺入后在推针时判断是否有阻力感， 如果遇到阻力，则稍退针,调整角度后再次推入，多因角度过大所致。一定要克服担心会给患者带来疼痛的心理，要有自信。

运针方法：头针一般采用捻转法。一般以拇指掌侧面与食指桡侧面夹持针柄，以食指的掌指关节快速连续屈伸，使针身左右旋转，小幅度高频率捻转，速度每分钟可达 200 次以上。进针后持续捻转 2-3 分钟，留针 5—10 分钟，反复操作 2-3 次即可起针。

头针临床疗效客观， 简单易学。是人类 20 世纪对针灸学领域的一个创举， 丰富和拓展了针灸理论与临床治疗。学习头针,首先要诊断明确,选穴精准,才能取得好的疗效。了解脑的功能分区及其供血来源,以及头针的作用机制,对指导临床选穴(区)和提高疗效有很大的帮助。良好的心理状态,勇于实践是增加信心与避免针刺疼痛的关键。

随着更多的临床和实验研究以及现代科学的发展,相信头针理论会更加完善,疗效更加可靠,从而更好地造福于人类。

参考文献

1．张子迪， 王锐卿， 刘敬萱，等。头皮针流派比较与分析。[J] 针刺研究，2021，（9）：809-814

2．吴建丽， 尹洪娜， 王德龙，等。头针疗法的起源及发展现状。[J] 广州中医药大学学报。2019，36.11

3．靳士英，金完成。实用头针穴线挂图。[M] 人民卫生出版社，2006.9

Jin shi-ying, Jin Wan-cheng. Scalp Acupuncture Wall Chart. People’s Medical Publish House. 2006.9

4．焦顺发。 焦顺发头针。[M]人民卫生出版社，2009。

5．方云鹏。 头皮针。[M] 西安：陕西科学技术出版社。1982.

6．张欣， 洪菲， 王金香， 等。方云鹏及方氏微型针灸体系。[J] 针法灸法。 2020，(39)：7

Shanghai J Acu-mox, 2020, (39)

7．运用方氏头针从心肝论治失眠。中医中药网。 https://www.zhzyw.com

The key points in the clinical application of scalp acupuncture

Dr Huian Liu

Introduction

Scalp acupuncture is an important component of modern micro-needle therapies. It is a needling therapy established by integrating the principles of traditional Chinese acupuncture with modern medical brain cortex functional localization and referencing the holographic theory of biology. Clinically, it involves using fine needles to stimulate specific areas or lines on the head to achieve therapeutic goals in treating various ailments.

While scalp acupuncture was first proposed and initiated in the 1950s, its widespread clinical application began in the 1970s. Over more than 70 years of clinical observation and research, it has been demonstrated that scalp acupuncture is not only a simple and safe method but also yields excellent clinical effectiveness. Its indications are remarkably extensive, especially showing unique efficacy in treating various diseases resulting from damage to brain tissue.

The International Standard Scalp Acupuncture (ISSA)

In 1983, after discussions among various experts, “Standardization Scheme for Scalp Acupuncture Procedure Sites and Methods in China” was drafted. In May 1984, during the World Health Organization's Western Pacific Region Meeting held in Tokyo, Japan, the document was officially adopted and named “The International Standard Scalp Acupuncture (ISSA)”. It was publicly released by the WHO in 1991 and promoted worldwide. This standard is based on traditional Chinese medicine theory, using regional positioning according to meridian selection, combining principles from traditional needling methods for penetration techniques. The standardized lines are closely associated with meridians, acupuncture points, and internal organs. The plan comprises 14 standard scalp acupuncture treatment lines classified into four regions, incorporating aspects of functional localization in the cerebral cortex while reflecting the characteristics of traditional Chinese acupuncture meridian theory.

Mr. Jiao Shunfa invented "scalp acupuncture" in 1970. Jiao's scalp acupuncture is one of the earliest forms of scalp acupuncture and remains one of the most widely practiced techniques. The International Standard Scalp Acupuncture (ISSA) was primarily formulated based on the Jiao Shunfa scalp acupuncture system. Among the 14 standard scalp acupuncture treatment lines outlined in this standard, 8 of these treatment lines align closely or share positions with the Jiao Shunfa scalp acupuncture technique. Mr. Jiao Shunfa was inspired by the theoretical basis of acupuncture and moxibustion, particularly the concept of "Front-*mu* points," which are areas where the *qi* of the internal organs converges. Most front-*mu* points are not the points of the same meridian but are located close to the corresponding internal organs. Similarly, Jiao believed that for treating brain-related ailments, focusing on the brain area, he could target acupuncture points close to the brain—namely, the scalp.

Jiao's scalp acupuncture system revolves around the idea that scalp acupuncture points represent potential functional zones of the brain. The principle of scalp acupuncture involves stimulating corresponding functional areas of the brain through scalp regions to promote the restoration and enhancement of brain function. Therefore, scalp acupuncture typically involves selecting lines or areas rather than traditional single-point needling.

The Jiao Shunfa scalp acupuncture system predominantly targets corresponding scalp areas related to functional localization within the cerebral cortex. For instance, the precentral gyrus represents the contralateral motor cortex, corresponding to the scalp area known as the motor area. Similarly, the postcentral gyrus oversees the contralateral sensory cortex, hence correlating with the scalp area designated as the sensory area. Following this pattern, a total of 19 stimulation areas were established: motor area, sensory area, dance tremor control area, vascular dilation and constriction area, emotional and psychological area, auditory and vestibular area, speech area 2, speech area 3, utilization area, lower limb sensation area, visual area, equilibrium area, mania control area, nose-smell-mouth-tongue area, thoracic area, stomach area, liver-gallbladder area, reproductive area, and intestinal area.

In 1968, Mr. Fang Yunpeng first proposed the Fang's Scalp Acupuncture technique while working in Lantian County, Shaanxi Province. It was initially promoted and gained recognition locally, earning the nickname "Lantian Scalp Acupuncture." This technique was widely applied and popularized in Shaanxi Province. In 1976, considering that the insertion points for scalp acupuncture mainly involved areas of the scalp covered by hair, Mr. Fang Yunpeng officially named the treatment system "Scalp Acupuncture." In 1983, Fang's Scalp Acupuncture was included in "The International Standard Scalp Acupuncture " for global promotion.

Fang's Scalp Acupuncture is based on modern medical brain cortex functional localization, integrating theories such as holography, Bagua, Luo Shu, etc. Fang Yunpeng introduced concepts such as "hidden image," "hidden organ," "inverted image," and "inverted organ." Additionally, he established 11 acupuncture areas. Moreover, beyond his creation of Scalp Acupuncture, after years of clinical practice, Fang Yunpeng also developed therapies like Hand Image Acupuncture, Foot Image Acupuncture, and more. These innovations significantly enriched the content of micro-needle therapies.

The various schools of scalp acupuncture can be generally categorized into three main theoretical approaches:

- Traditional Chinese medicine theory concerning the relationship between the brain and meridians.
- Using modern medical brain cortex functional localization as a foundation to map corresponding acupuncture areas on the scalp based on their projection zones.
- Integrating the holographic theory of biology along with traditional theories such as *ba gua*, *luo shu*, Stems and Branches (*wu yun liu qi*). These combinations have led to the establishment of diverse acupuncture areas, thereby creating multiple distinct schools or approaches within scalp acupuncture.

The current research on the mechanisms of scalp acupuncture involves several areas:

- Hemodynamics;
- Hemorheology;
- Electrophysiology of the Brain;
- Biochemistry and Immunology.

The mechanisms involved in scalp acupuncture treatment for brain-related illnesses can encompass various aspects. However, they all share a common reliance on improving local cerebral blood flow. Therefore, understanding the sources supplying blood to the brain becomes a crucial factor in precisely selecting acupuncture areas for clinical application.

The methods and key points for selecting acupuncure points in clinical practice

Clinical selection of acupuncture points in scalp acupuncture, guided by basic theories and known relevant mechanisms, involves:

Corresponding Disease Locations in the Brain: Selecting points based on the specific brain areas associated with the pathology of the disease.

Choosing Points Based on Cerebral Blood Supply: Selecting points based on the source of blood supply related to brain function areas. This includes understanding the arterial systems involved in supplying blood to different regions of the brain. For instance:

a. Internal Carotid Artery System: Involving the anterior cerebral artery, the middle cerebral artery (including primary cortical branches and the central branch, such as the lateral lenticulostriate artery), and ophthalmic artery.

b. Vertebrobasilar Artery System: Including the vertebral artery (supplying the posterior inferior cerebellar artery and the posterior spinal artery) and the basilar artery (supplying the anterior inferior cerebellar artery, pontine arteries, superior cerebellar artery, and posterior cerebral artery).

Indeed, the human brain comprises approximately 2-3% of the body's total weight. However, the brain requires a significant amount of blood supply, typically accounting for 15-20% of the body's overall blood flow.

The two primary systems supplying blood to the brain are:

Internal Carotid Artery System: Responsible for supplying the anterior two-thirds of the cerebrum and parts of the midbrain.

Vertebrobasilar Artery System: Supplies the posterior one-third of the cerebrum, parts of the midbrain, as well as the cerebellum and brainstem.

Other therapies and practices which can potentially help improve cerebral blood flow

- Acupuncture of neck and cervical acupoints aims to facilitate the circulation of local meridians and vital energy (*qi* and blood). Points such as *renying*, *fengchi*, *wangu*, *tianzhu*, and *jingjiaji* are utilized for this purpose.
- The use of body acupuncture and Chinese herbal medicine can enhance overall blood supply, improve blood quality, and optimize hemorheological parameters. Acupoints like *renzhong*, *neiguan*, *zhongwan*, *qihai*, *guanyuan*, *zusanli*, and *fenglong* are among those that have these effects.

Distinguishing and selecting acupuncture points for common types of aphasia in clinical practice

- Motor Aphasia: These patients can understand others' speech and produce sounds, but are unable to articulate complete sentences or speak coherently. Patients often appear distressed. This indicates a lesion in the posterior portion of the Broca's area in the dominant hemisphere's cerebral cortex.
  Acupoint selection: MS10, Jiao's lower 2/5 of the motor area (Language Area 1), Fang's speech area.

- Anomic Aphasia: The patient primarily exhibits difficulty in naming objects. When they see common items such as a pencil or a flashlight, they can't name the object but can describe its function. They are unable to express the noun but can describe the object's usage. This difficulty often leads to a sense of disdain.
  Anomic aphasia results from damage in the parieto-temporal junction of the dominant hemisphere's brain, specifically in the angular gyrus or posterior part of the temporal gyrus.
  Acupoint selection: MS9; Jiao's Language Area 2; Fang's Runping Area.

- Wernicke aphasia: The patient can speak but cannot comprehend what others say, resulting in irrelevant or disorganized responses, using incorrect words and grammar. Occasionally, they can respond appropriately by judging from the situation or lip movements of the speaker.
  The lesion is located in the posterior part of the superior temporal gyrus, middle temporal gyrus, and sometimes the supramarginal gyrus (part of the inferior parietal lobule) of the dominant hemisphere's cerebral cortex.

Acupoint selection: MS11; Jiao's Language Area 3; Fang's Signal Area.

- Dysarthria (Articulation Disorder): This is typically a speech disorder caused by muscle paralysis, weakened contraction strength, or lack of coordination in the muscles responsible for speech articulation. It is characterized by unclear speech and slow speech rate.
  It can be observed in lesions affecting the brain, cerebellum, and medulla oblongata, such as pseudobulbar palsy, bulbar palsy, or vertebral-basilar artery hemorrhage or infarction.
  Acupoint selection focuses on improving vertebral-basilar artery blood supply. Points include MS14; Jiao's Balance Area; Fang's Balance Area. Additionally, scalp acupuncture areas related to the onset site can be used, and it may be combined with neck acupoints such as *lianquan* (CV23), *fengchi* (GB20), *wangu* (GB12), *tianzhu* (BL10), and others.

The key to reducing needling pain

Fine quality filiform needles should be used, typically 0.25-0.30 gauge and 40-60mm in length. There are two specific techniques: the flying needle insertion method and rapid needle insertion method. I personally favour a technique referred to as the quick insertion and slow advancement method. For beginners, the slow insertion and slow advancement method is suggested.

Before inserting the needle, the recommended approach involves repeatedly pressing the insertion point with a fingernail. After determining the proper angle and direction, the needle is slowly inserted and advanced forward. The ideal advancement technique involves a smooth and resistance-free sensation while advancing the needle.

The key is to maintain a small angle upon needle insertion, typically less than a 25-degree angle, adjusting this angle according to the specific cranial structure and the diverse nature of acupoints. The optimal direction for needle advancement post-insertion is towards the surface of the scalp.

The practitioner should ensure a calm and focused mindset before the procedure. Post-insertion, the needle advancement should be executed with a keen awareness of resistance. If resistance is encountered, a slight withdrawal of the needle and angle adjustment are recommended, as excessive angle might be the cause. It's essential to overcome any concerns about causing pain to the patient and to maintain confidence.

Regarding needle manipulation: for scalp acupuncture, a twisting method is typically employed. The needle handle is held between the palm side of the thumb and the radial side of the index finger. The rapid flexion-extension movement of the index finger's metacarpophalangeal joint creates a quick continuous rotation of the needle body, involving a small amplitude, high-frequency twisting at a speed exceeding 200 times per minute. After needle insertion, continuous twisting is performed for 2-3 minutes, followed by retaining the needle for 5-10 minutes. This process may be repeated 2-3 times before removing the needle.

Currently, there are numerous schools of scalp acupuncture, and clinical reports have shown certain therapeutic effects. However, there is substantial work needed to make scalp acupuncture theory more objective and aligned with the essence of things:

- Further clinical research is required to standardize indications for acupoints that share the same theory across different schools.
- For parts of the theory that differ among various schools, extensive clinical and experimental research is essential to differentiate between fact and fallacy, providing evidence-based support.
- Advancements in understanding the mechanisms of scalp acupuncture's action will contribute to refining the theory of scalp acupuncture.

As modern physiology continues to develop and our understanding of brain function improves, it will undoubtedly facilitate the further refinement of scalp acupuncture theory.

Conclusion:

Scalp acupuncture has objectively demonstrated clinical efficacy and is straightforward and easy to learn. It stands as an innovative development in the field of acupuncture in the 20th century, enriching and expanding both acupuncture theory and clinical treatments.

To learn scalp acupuncture, it's crucial to have a clear diagnosis and accurate acupoint selection to achieve optimal therapeutic effects.

Understanding the functional divisions of the brain, its blood supply, and the mechanisms of scalp acupuncture greatly assists in guiding acupoint selection and improving treatment efficacy.

Maintaining a positive psychological state and a willingness to practice are key factors in boosting confidence and minimizing needle-induced discomfort.

With further clinical and experimental research, along with the advancements in modern science, it is believed that scalp acupuncture theory will become more refined and its therapeutic effects more reliable, ultimately benefiting humanity more effectively.

Symptoms: Difficulty in producing speech due to weakness of the muscles involved in speech.

Acupuncture Approach: Points may aim to improve muscle coordination and speech articulation, targeting areas associated with motor control and articulation.

The treatment strategy for each type of aphasia may involve selecting acupuncture points to address specific areas associated with language processing, speech production, comprehension, and articulation. Tailoring the treatment to the specific type and severity of aphasia is crucial for effective intervention. It's recommended to consult with a qualified acupuncturist or healthcare professional experienced in treating language disorders to design an appropriate treatment plan.

肩部病变与针刺

吴继东

肩痛是针灸临床最常见病种之一。我们有时候碰到的肩痛病人特别容易治；有时候又特别难治。这是为什么？

先让我们来看看肩部的解剖。肩关节的特征有以下几点：

- 多轴关节；
- 在多个方向上的活动(前屈、后伸、外展、内收、内旋和外旋)，并且可以完成有上述活动组成的复合运动－－旋转运动；
- 人体运动范围最大的关节。

正是因为这些特点，导致肩关节损伤的发病率较高，在中老年人中，肩关节的关节炎也屡见不鲜。

- 骨，肌腱和肌肉之间的关系

就骨骼和肌肉而言，哪个付出的劳动更大更多？
骨骼起支撑作用，而大量的肩部关节活动是靠肌肉来完成的。
据说直接参与肩部和肩胛骨活动的肌肉有17块之多。【1】

根据其功能：
能使肩胛骨上提的肌肉有：斜方肌（上）、肩胛提肌、菱形肌； 能使肩胛骨下降的肌肉有：斜方肌（下）、胸小肌、前锯肌、背阔肌； 能使肩胛骨后缩的肌肉有：斜方肌、菱形肌、肩胛提肌；能使肩胛骨前伸的肌肉有：胸小肌、前锯肌； 能使肩胛骨上回旋的肌肉有：斜方肌、前锯肌；能使肩胛骨下回旋的肌肉有：肩胛提肌、胸小肌、菱形肌。

除了以上肌肉，附着在肩胛骨上的肌肉还有：三角肌、肱二头肌、肱三头肌、肩
胛下肌、冈上肌、冈下肌、大圆肌、小圆肌、喙肱肌、肩胛舌骨肌、背阔肌。

如果再加上间接的肘腕关节颈部的肌肉，将会更多。

- 肌肉与肌腱的关系
  - 肌腱主要以负重和促进肢体收缩为主，主要作用是受到力的牵拉后向骨面传播，从而引起肌肉收缩后的肢体运动。

  - 肌肉主要是肌肉细胞构成，主要是用来收缩肌肉，从而使肢体产生运动。当肌肉细胞产生收缩后可以带动肌腱，从而带动骨质使肢体产生运动。

  - 肌腱主要是由致密结缔组织构成，主要是由弹力纤维和胶原纤维构成。胶原纤维使韧带具有一定的强度和刚度，弹力纤维则赋予韧带在负荷作用下延伸的能力。由于肌腱比较坚韧，因此可以加强关节稳定性，使内脏固定于正常位置，限制其活动范围。总而言之，两者都可以使肢体产生运动，但功能却存在一定差异。

  - 肌腱的功能主要以负重和促进肢体收缩为主，肌腱是非常坚韧的组织，在肌肉的两端，止于骨面，所起的重要作用是受到力的牵拉后向骨面传播，引起肌肉收缩后的肢体运动。

- 与肩痛相关的问题有：
- 肩部关节炎
- 骨刺
- 肩滑囊炎
- 肩凝症
- 肩关节和相关部位的劳损
- 选转肌袖损伤
- 肩部姿势不良等

针灸学上有三阴三阳经经过肩颈部，还有30多的穴位可以治疗肩痛。那么，究竟该用哪个穴位？哪个穴位最有效？没有人能说的清楚，各有各的道理。

- 针刺治疗肩痛的几个小技巧：

1. 给予最够大的刺激量，这个足够大是指病人能忍受为度
2. 辩肌论治
3. 整肌观念
4. 动起来！

能符合以上几点的针刺方法，浮针是非常好的刺法！
浮针刺激的层次是皮下结缔组织，神经末梢最少，故可以用大刺激量。根据肌肉的紧张度而专门放松特定的肌肉。当场的验证可以保证即时效果，并反证辨别的肌肉是否正确。因为刺激的是皮下结缔组织，不及肌肉，病人可以带针活动肩关节。

最后一个重要点是让病人改变原先的不良姿势倾向。否则肩痛还会再来。

Shoulder Lesions and Acupuncture

Jidong Wu

Shoulder pain is one of the most common clinical conditions treated with acupuncture. Sometimes, the patients with shoulder pain that we encounter are particularly easy to treat, while at other times, they are especially challenging to treat. Why is this the case?

Let's first take a look at the anatomy of the shoulder. The characteristics of the shoulder joint include:

Multi-axial joint.

Movement in multiple directions (flexion, extension, abduction, adduction, internal rotation, and external rotation), and it can perform composite movements composed of the above activities - rotational movement.

The joint with the widest range of motion in the human body.

It is precisely because of these characteristics that the incidence of shoulder joint injuries is relatively high. In middle-aged and elderly individuals, shoulder joint arthritis is also quite common.

The relationship between bones, tendons, and muscles:

Concerning bones and muscles, which one bears more significant and greater labour?

Bones provide support, while a substantial amount of shoulder joint movement is accomplished by muscles. It is said that there are 17 muscles directly involved in the movement of the shoulder and scapula.

Based on its function,

the muscles that can elevate the scapula include: Upper trapezius, levator scapulae, rhomboid muscles; The muscles that can depress the scapula are:

Lower trapezius, pectoralis minor, serratus anterior, latissimus dorsi; The muscles that can retract the scapula are:

Trapezius, rhomboid muscles, levator scapulae

The muscles that can protract the scapula are:

Pectoralis minor, serratus anterior

The muscles that can upwardly rotate the scapula are:

Trapezius, serratus anterior

The muscles that can downwardly rotate the scapula are:

Levator scapulae, pectoralis minor, rhomboid muscles

If we also consider the muscles of the indirect elbow, wrist, and neck joints, the number will be even greater.

Relationship between muscles and tendons:

- Tendons primarily bear weight and facilitate limb contraction. Their main function is to transmit force backward to the bone surface after being pulled by force, thereby causing limb movement after muscle contraction.
- Muscles are mainly composed of muscle cells and are primarily responsible for contracting muscles, thereby producing limb movement. When muscle cells contract, they can move tendons, thus moving the bones and causing limb movement.
- Tendons are primarily composed of dense conective tissue, consisting of elastic fibers and collagen fibers. Collagen fibers give tendons a certain strength and rigidity, while elastic fibers provide the ability for ligaments to stretch under load. Due to the toughness of tendons, they can enhance joint stability, fix internal organs in their normal positions, and limit their range of motion. In summary, both can generate limb movement, but their functions have some differences.
- The primary functions of tendons are to bear weight and facilitate limb contraction. Tendons are very tough tissues that extend from the muscle on both ends, stopping at the bone surface. Their important role is to transmit force backward to the bone surface after being pulled by force, causing limb movement after muscle contraction.

Concerning issues related to shoulder pain:

- Shoulder joint arthritis
- Bone spurs
- Shoulder bursitis
- Adhesive capsulitis (Frozen Shoulder)
- Strain in the shoulder joint and related areas
- Supraspinatus muscle cuff injury
- Poor shoulder posture, etc.

In acupuncture, there are three *yin* and three *yang* meridians that pass through the shoulder and neck area, and there are over 30 acupuncture points that can be used to treat shoulder pain. So, which acupuncture points should be used? Which acupuncture point is the most effective? No one can say for sure; each has its own reasoning.

Several small techniques for acupuncture treatment of shoulder pain:

- Provide the maximum amount of stimulation, with 'enough' being defined as what the patient can tolerate.
- Differentiate muscles for treatment.
- Adopt a holistic muscle concept.
- Get moving!

Subcutaneous needling is an excellent acupuncture method that can fulfill the points mentioned above! Subcutaneous needling stimulates the subcutaneous connective tissue with minimal involvement of nerve endings, allowing for a higher level of stimulation. It specifically targets and relaxes particular muscles based on their tension. Real-time verification ensures immediate effectiveness and serves to confirm whether the targeted muscles are correct. Since the stimulation is applied to the subcutaneous connective tissue rather than the muscles, patients can move their shoulder joints with the needles in place.

The final crucial point is to encourage patients to change their previous poor posture tendencies. Otherwise, shoulder pain may recur.

【1】https://www.zkline.com/thread-85-1-1.html Shoulder Disorders and Acupuncture，Jidong Wu

在腹诊思维指导下的更年期综合征的治疗

王迎

更年期综合征的定义

更年期综合征是指女性在绝经前后，由于性激素含量的减少导致的一系列精神及躯体表现，如植物神经功能紊乱、生殖系统萎缩等，还可能出现一系列生理和心理方面的变化，常见的主要症状为：潮热，盗汗，失眠，焦虑。

腹诊治疗的着眼点

我们常讲五脏有疾，六腹必瘀。腹部的淤阻可能是引起现在症状的原因，也可能是现症的结果。不管那一方面问题，只要我们通过治疗，疏通了腹部的淤阻，都会对疾病的治愈起着至关重要的作用。

虽然更年期综合症的临床表现因人而异，多种多样，。但是主要的症状表现就是潮热，盗汗，失眠，焦虑。而这些症状正是由于腹部的中焦淤阻，造成的心火与肾水不能上下交通，阴阳失衡。下焦寒凉，虚热上炎。我运用腹诊治疗更年期综合征就是从消除腹部的淤阻入手，加以温通下焦，引热下行，及上焦制凉镇静安神。

治疗方案

第一步：仔细检查，包括腹，胸，颈，背。发现阳性体征；

第二步：取与腹征相对应的穴位，首先减轻或消除腹部的压痛，疏通腹部的淤阻；

第三步：针对下寒上热的病机，分别采用关元深层制热针法和印堂浅刺制凉针法，平衡阴阳；

第四步：对症处理遗留下来的伴随症状。

什么是制热制凉针法

制热制凉针法是我们科研团队针灸梦工厂，瑞士的郭松鹏医生和他的夫人李玉洁医生，在揭示了传统的烧山火及透天凉针刺手法的秘密后，研创的一种简便，易操作，易重复的一种简化版的烧透手法，我们称之为制热制凉针法。制热制凉八字诀：下压制热，提挑制凉。

关元穴制热的操作要点

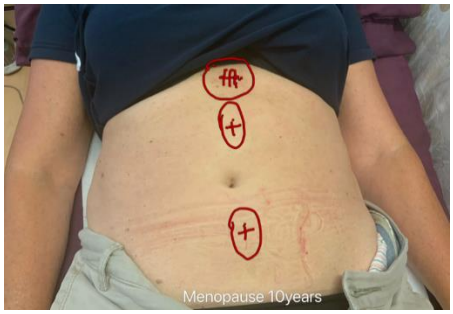
- 针刺入皮下后要缓慢进针，当感到针下有抵触感的时候就要停下来。
- 把针尖固定在这个感应原点，然后缓慢轻轻的下压，可以看到下压的凹陷。
- 一定要记住不能让针尖穿透这个感应原点。
- 保持下压的力度，医生和病人自然呼吸，候热至。

印堂穴制凉的操作要点

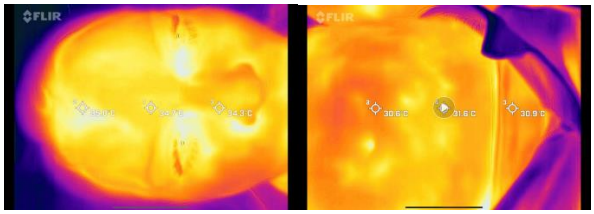
- 快速将针刺入极浅层或浅层
- 然后将针尖挑起，让皮肤出现一个皮丘。
- 医生和患者自然呼吸，候凉制。

病例：更年期综合症10年

患者女，61岁，潮热盗汗每天发作10余次，伴失眠。



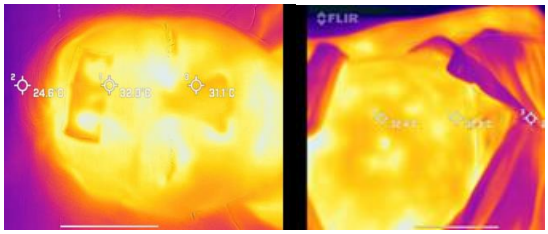
治疗前测量印堂和关元穴的皮肤温度



治疗过程

1. 针双侧的胃气线，双照海，俞府，双内关，太白消腹征。去除中焦於阻。
2. 关元制热，印堂制凉调病机

针刺时测温



治疗结果

患者治疗结束后感全身舒适放松，而且从治疗前后的肤温来看，开始印堂是34.7° C， 关元是31.6 ° C。这是典型的上热下寒的表现。针刺后印堂温度是32° C， 关元是32.8° C。上下温度基本是达到了平衡，从而达到了有效的治疗目的。

不同的腹征，相同的治疗思路

虽然每个人的腹部检查阳性体征不同，但是治疗的思路都是一样的。治疗都是要以先消除患者腹部的阳性体征为主。取穴都是与腹征相对应的标准穴位。这就是同病异治。然后根据其上热下寒的病机采用制热制凉针法。当然对于那些潮热盗汗症状不是特别明显的病人，也可以只单用关元深层制热，可以根据临床实际情况，灵活运用。这套方法，不仅适用于更年期综合征的患者，同样适合于任何具有上热下寒病机的患者。

The treatment of menopausal syndrome under the guidance of abdominal diagnosis

Ying Wang

Menopausal syndrome refers to a series of mental and physical manifestations caused by the decrease of oestrogen before and after menopause, such as autonomic dysfunction, reproductive system atrophy, etc. and a series of physiological and psychological changes may occur. The main symptoms include hot flashes, night sweats, insomnia and anxiety.

we usually say if the five *zang* organs have illness, the six *fu* organs must be stagnated. These obstructions in the abdomen may be the cause of the current symptoms or may be the reasons that affect our body cannot be recovered in time. As long as we could clear the abdominal blockage through the treatment , it would play a vital role to cure the disease. Therefore, the first treatment for us is to reduce or totally clear the positive abdominal signs.

Although the clinical symptoms of menopause syndrome vary from person to person, the main symptoms are hot flashes, night sweats, insomnia and anxiety. These symptoms are due to the stasis of the abdomen, which causes the heart fire and kidney water cannot communicate up and down, yin and *yang* are out of balance. It makes lower *jiao* cold, and upper *jiao* fire flare up.

Therefore, treatment for menopause starts with clearing the blockage in the abdomen, then warm the lower *jiao*, induce the heat to descend, and cool and calm the upper *jiao*.

Treatment Plan

1. abdominal examination to find postive signs.
2. following the abdominal signs to choose the corresponding points in distance to reduce or clear the pressure pain in the abdomen.
3. according to its pathogenesis of lower *jiao* cold and upper *jiao* hot, we choose CV4 (*guan yuan*) using warm method and GV29 (*yin tang*) using cool method.
4. treat the symptoms.

The method of warming and cooling needling is an invention of Guo Song Peng and Li Yu Jie, two teachers at The Acupuncture DreamWorks. They studied the traditional acupuncture operation method "Burning Mountain fire" and "Penetrating heaven cool" to respond to warming and cooling of the body. A new needling method was invented after a comprehensive physiological structure and functional analysis, which they named the simple 'Burn-Penetrate' needling technique. They simplified the complicated traditional acupuncture operation into the most basic techniques of pressing and lifting and directly showed the basic principle that acupuncture will cause the body to produce a warm or cool response. Moreover, this acupuncture technique has two characteristics: it is simple to perform and easy to reproduce. In clinical practice, it can be used alone or in combination with other acupuncture methods.

How to manipulate warming method in CV4

1. using 0.25*40 needle, quickly insert the needle in to the skin
2. then slowly go deeper, and stop until you feel the resistance.
3. Keep the tip of the needle on this position, slightly use force to push down the needle , to make the point look like a small depression.
4. continue to keep push down the needle until patient feel warm in local or distance area.

How to manipulate cooling method in *Yintang* point

1. choose 0.25*25 needle, insert the needle at 45—75 degree toward to the nose.
2. lift the needle's tip up , to make the skin like a small mound.
3. continue to keep this manipulation until the patient feels cool or calm.

Case study:

Menopause syndrome for 10 years

Female patient, 61 years old. Chief complaint: hot flushes, sweats more than 10 times a day, accompanied by insomnia.

Treatment

- Needling in stomach line, bi-lateral *zhaohai*, *shufu*, *neiguan*, *taibai* to reduce the blockage in middle *jiao*.
- Using warming method on *guan yuan* and using cooling method on *yin tang*.

Results

The patient felt more comfortable after the treatment.

Temperature change: *yin tang*: from 34.7°C to 32°C; *guan yuan*: from 31.6°C to 32.8°C

Body is more balanced from hot in upper *jiao* and cold in lower *jiao*.

Treating the same disease differently

Although these patients all suffered from menopausal symptoms, their abdominal signs are different, so we should choose different points to treat.

This method has gained very good result in the clinical practice. If the patients have the same pathogenesis of lower *jiao* cold and upper *jiao* hot, we could choose the same treatent: using warming method on CV4 and cooling method on GV29.

“阳化气，阴成形” 生物医学本质探讨

房才龙

中文摘要： 阳化气，阴成形是中医对人体内对立依存的两方面的机制维持人体生理活动动态平衡的高度概括。大脑皮层，通过植物神经及下丘脑，垂体，靶腺分泌的一些内分泌激素等实现或者通过分解代谢释能，或者通过合成代谢储能，维持体温的稳定是其生物学基础。 中医的五藏可从不同方面参与阳化气阴成形过程，各种不同因素可导致人体代谢失衡而致病需以相应的方法补偏救弊。

关键词：阳化气 阴成形 耗能 储能

Abstract: Yang transform bigger molecules to smaller moleculars Qi (Yang Hua Qi), Yin transforms smaller molecules to bigger molecules and store them in organs (Ying Cheng Xing) is a well generalization of traditional Chinese medicine on the two opposing and interdependent mechanisms in the human body to maintain the dynamic balance of human physiological activities. The cerebral cortex, through autonomic nerves and some endocrine hormones secreted by the hypothalamus, pituitary gland, and target glands, releases energy through catabolism or stores energy through anabolism, and maintaining the stability of body temperature is its biological basis. The Five Zangs of Chinese medicine can participate in the process of Yang Hua Qi and Ying Cheng Xing from different aspects. Various factors can lead to metabolic imbalances in the human body and cause diseases. Corresponding methods must be used to remedy the imbalance.

Key Words: Yang Hua Qi, Ying Cheng Xing, energy expenditure, energy storage

我国古代哲学家及医学家认为宇宙万物包括人体存在着对立统一的力量决定其发生发展和变化，称之为阴阳。即《易经 》 所谓的“一阴一阳之为道”及《素问. 阴阳应象大论 》：“阴阳者, 天地之道也, 万物之纲纪, 变化之父母, 生杀之本始, 神明之府也”。阴阳促进人体的生理变化可表现为“ 阳化气，阴成形”。结合现代物理学的认识, 物质和能量关系密切，物质可以产生能量，而热能从古人的条件显然是最易感知的，所谓“阳甚则热, 阴甚则寒”。 因此， 这很有可能是 古人以 阴阳相称 这样的对立统一机制的原因。人体的生理病理变化即是在人体内部阴阳机制作用之下不断动态的或化气，或成形的结果。从现代生物医学出发对阳化气，阴成形等进行深入的探讨将有助于中西医结合更好的理解人体的生理病理变化并指导临床。

1. 阳气产生的生理基础

内经认为人体一日之中阳气的产生是在早晨通过自然光从命门目开始，由卫气所发动。黄帝内经对人体的卫气从生理病理及治疗方面有较为全面的认识，实际上相当于神经系统的功能，而激发阳气是其重要的功能之一[1]。 早晨卫气从睁眼开始，沿十二经循行至周身脏腑组织，阳气逐渐增多，至中午阳气最甚，而后逐渐减少，入夜卫阳气减少而入眠， 次日开始另一循环。 《灵枢. 卫气行篇 》:“ 黄帝问 于 岐伯曰:愿闻卫 气之行, 出入之合, 何如? ..... 故卫气之行，一日一夜五十周于身，昼日行于阳二十五周，夜行于阴二十五周，周于五藏。是故平旦阴尽, 阳气出于目, 目张则气上行于头 , 循项下足太阳, 循背下至小趾之端. ..... 复合于目, 故为一周。阳尽于阴, 阴受气矣。其始入于阴, 常从足少阴注于肾. ..... 亦如阳行之二十五周, 而复合于目”。《素问. 生气通天论 》： “ 故阳气者, 一日而主外。平旦人气生, 日中而阳气隆, 日西而阳气已虚, 气门乃闭”。现代生物医学对此生命现象有更多细节的研究。在人体因为阴阳机制的变化伴随热量改变，所以考察人体生物学的储能及释放能量产热的相关机制，就可以一定程度上反应中医对人体的阳化气以及阴成形认识。所有能导致减热的因素属于阴，所有导致产热的因素属于阳。人体细胞能量的产生是在细胞内的线粒体，在线粒体内可以通过三羧酸循环机制对氨基酸，游离脂肪酸，葡萄糖燃料进行氧化，为人体活动提供能量。在人体，神经内分泌系统不同的分工会导致热能的增多或减少，或者是合成代谢储能，或者是分解代谢释能产热（见附图一）。交感神经系统功能是卫气温煦人体功能的重要的生物学基础[1]。研究表明交感神经兴奋释放的神经递质去甲肾上腺素以及兴奋肾上腺髓质产生肾上腺素促进糖原，脂肪组织，甘油三酯分解以及糖异生，增强分解代谢产热[2,3,4]。而且增加心输出量，升高血压增加组织细胞的血液灌注，为细胞提供更多的燃料和氧气，促进产热。并且交感神经系统和下丘脑-垂体-肾上腺轴相互作用，在慢性的紧张压力情况下交感神经系统可提高皮质酮的血浓度[5,6]。糖皮质激素皮质醇可促进糖原，脂肪组织，肌肉蛋白，甘油三酯的分解以及糖异生[2,7,8]. 甲状腺素和交感神经关系密切：在甲状腺功能亢进症中，临床会有心动过速、心悸、震颤、出汗等表现表明交感肾上腺系统过度活跃，而在甲状腺功能减退症中，心动过缓表明交感神经活动不足，体温过低，运动和大脑活动减慢。交感

神经的激活参与生长激素的产生，释放，生长激素可诱导葡萄糖产生，脂肪分解，但有促生长作用[2,9]。激活的交感神经刺激肾上腺分泌肾上腺素，从而增加胰高血糖素的分泌. 胰高血糖素拮抗胰岛素，升高血糖[10,11]，有证据表明血管紧张素 II 增强中枢和外周交感神经系统活性[2,12]。 瘦素可影响交感神经，促进脂肪分解[13]。这些是分解代谢，促进 ATP 的生成，释放能量，是产热的因素，是阳化气的主要参与者，它们大都具有诱发胰岛素抵抗的作用抗[2] ，这些因素在第二信使 cAMP 的参与下，促进蛋白质，脂肪，糖原的分解为氨基酸，，脂肪酸，葡萄糖，并进一步的在线粒体内被降解为二氧化碳并产生 ATP，推动人体的一切生命活动。

而副交感神经及其他激素等则具有储能作用[2]，是阴成形过程的参与者。副交感神经对交感神经系统有拮抗作用，促进脂肪肝脏储存能量。促进胰岛素分泌[14].胰岛素可促进葡萄糖转化为糖原，脂质储存，促进蛋白合成，并促进生长，雌激素 促骨骼生长，增加胰岛素介导的肌肉葡萄糖摄[2,15]. 胰岛素样生长因子具促进肌肉，骨骼生长作用[2]。维生素 D 促骨骼生长，骨钙素有促骨骼生长及胰岛素支持作用[2]。 这些因素在细胞内通过第二信使 cGMP 促进原料物质氨基酸，脂肪酸，葡萄糖合成为储能物质蛋白质，脂肪，糖原储存于肌肉，肝脏，皮下，骨骼等处。

在生理情况下化气和成形，耗能和储能处在动态平衡当中，并保持体温在一适度的范围内， 维持人体生命活动的正常。调控的中心在下丘脑的体温调节中心。人体的生物钟由特定的基因决定的蛋白所控制，视交叉上核（SCN）是昼夜节律的主要起搏器[16,17]，早晨，眼视网膜神经节细胞从外界接受光信号通过视网膜下丘脑束传达到 SCN，并进一步向上传达信号到大脑皮层把人从睡眠中唤醒，交感神经系统和它有着重要的协同作用[18,19]。研究表明 SCN 通过交感神经系统控制心脏功能的昼夜节律。非快速眼动睡眠 （REM）期比起清醒状态下交感神经活动爆发的平均 振幅以及血压和心率水平显著下降，交感神经冲动的下降，平均动脉压下降了大约 10%。在 REM 期 ，副交感神经驱动增加[20, 21]. 夜间体温降低。人体通过视觉唤醒大脑，并影响交感神经系统等产热因素升体温，至夜间分解代谢率低，体温低，和上述内经对人体生命现象的观察是一致的。

2. 阳气在人体的产生和中医的五脏皆有关系

人体的器官组织细胞的活动离不开新陈代谢及能量，中医认识也是一样对人体的阴阳，内经强调了阳气的重要性。如。《素问.生气通天论 》：阳气者，若天与日，失其所，则折寿而不彰。故天运当以日光明。后世明代张景岳，赵献可，薛立斋及近现代也有不少医家重视阳气，但特别重视肾阳，命门阳气，那么其生物学基础到底是什么？

2.1. 命门，肾阳在人体中的实质对应

命门是中医基础理论中的一个重要概念 ， 列代医家对其在人体的部位，生理功能及其和其他脏腑的关系，病理变化及临床用药各方面有不少的论述。近代秦伯末对此有着较为全面的认识和运用[22]。 而现代生物医学对人体的认识提供了一个很好的视角去理解中医所说的命门。从文献出发，我们可以发现命门的位置概念涉及到两方面， 一个是灵枢所说的命门是指目，眼睛，《 灵枢。根结篇》：“太阳根于至阴，结于命门，命门者，目也。” 如上文所述它是一日阳气肇始之处。而一生生命终结则瞳孔散大及闭眼， 这在后世医家中并没有引起太多的关注。

二是指命门为人体一生性命的根本其位置和肾相关，内经没有这样的论述，而是认为肾藏精，是决定人体生长壮老已生理病理变化的根本。中医关于肾的概念和现代生物医学对应实际上是多元的[23]。内经把决定人体生理病理变化的根本和肾相联系的理由及依据是什么？ 从内经的论述及逻辑出发， 可以发现内经所说的肾究竟是什么样的概念。其一。肾的主要功能是主水，和膀胱相表里，这无疑和现在所说的肾脏是一样的，《内经》“ 腰者，肾之府也”，“肾主水”， “肾者胃之关，关门不利，故聚水而从其类也，上下 溢于皮肤，故为附肿”

人体的新生命是男子的精子进入女子的体内后发生的，这是常识，现在很清楚是要和卵子结合， 古人观察到和月经有关，所以有父精母血的说法，射出的精液从尿道而出，古人不太清楚精子实际上是由睾丸产生，由输精管借道尿道而出，按照五脏藏而不泄，六府泄而不藏的理论，和泄而不藏的膀胱相表里的藏而不泄的肾脏就很可能被误认为是藏精之所。而且无论是女子的月经来潮，男子的排精发生都和肾有关。如《素问.上古天真论》：“女子二七而天癸至，任脉通，太冲脉甚，月事以时下，故有子。…… 丈夫二八肾气盛，天癸至，精气溢泻，阴阳和，故能有子”。这应该就是内经肾藏精理论来源的逻辑分析。 难经以后的一些医家对肾藏精的位置有进一步的认识，认为应该是藏在和肾密切相关的命门（生命由此而开始）。毕竟精虽然从尿道排出，但应该和主水的肾及排尿的膀胱还是应该有所区别。如难经认为左为肾，右为命

门，命门是男子藏精之所（其实是产生精子的睾丸）及与女子产生经血的子宫关系密切（其实是产生卵子的卵巢）， 并且和神密切相关” 如《难经.三十六难》曰：“肾两者，非皆肾也，其左者为肾，右者为命门。”， 《难经。 三十九难》曰：“命门者，诸精神之所舍也。男子以藏精，女子以系胞，其气与肾通。具体的体表相对应的位置是 在“七节之旁，中有小心”. 至于其功能，化生元气为生命活动的根本。《难经。八难》：“生气之原者，谓肾间动气也，此五脏六腑之本，十二经之根，呼吸之门，三焦之 原，一名守邪之神，故气者人之根本也。”
。张景岳则有更为明确的说法：《类经附翼·真阴论》：“肾有精室，是曰命门”，“夫命门者，子宫之门户也”。孙一奎认为右肾并非命门，而应该是在两肾中间，即难经所说的肾间产生动气之所， 张景岳，孙一奎从功能方面对命门进行了进一步的发挥。《景岳全书·传忠录》：“命门为元气之根，为水火之宅，五脏之阴气非此不能滋，五脏之阳气非此不能发。” （《类经附翼·求正录》：“故命门者，为水火之府，为阴阳之宅，为精气之海，为死生之窦”创左归丸，和右归丸， 强调了命门的重要性。薛立斋常用八味丸益火，六味丸壮水。

综上所述，实际上内经所说的精藏于肾之处和难经，温补学派论述的命门实质是有着同样的内涵的，先天之精（所谓的男精及女血， 实际是精子和卵子）受精卵所携带的遗传物质基因是一切人体的元精，其转录翻译的各种各样的蛋白是生命活动的元气，人体的一切阴阳生命活动由此而发生。特别是元精元气所化生的元神又通过化气，成形的阴阳两方面的机制，控制人体生长壮老已的生命活动，是人生命活动的肇始及生命历程中的根本。
现代对肾阴肾阳特别中医肾阳虚的本质，沈自尹等通过临床观察发现具有畏寒肢冷肾阳虚表现的患者的下丘脑—垂体—甲状腺、性腺、肾上腺皮质轴都有着不同程度的功能减退。男性肾阳虚者亦有性腺轴不同程度功能紊乱，而仅有阳萎、早泄症状者性腺轴功能基本正常[24]。而对肾阴虚的研究较少。对肝肾同源，肝肾的密切关系的本质的阐述也不多。如果结合上述阳化气，阴成形的相关的植物神经及内分泌激素的产能，储能作用，以及下文所述的植物神经系统和中医肝脏功能相关是可以得出植物神经及相关的内分泌激素是对应于肝肾之阴和肝肾之阳的。

2.2. 心，肝，脾，肺四藏在人体阳气产生中的作用（见附图二）。
理论的产生来自于实践，经得起实践考验的知识和理论才是真知。中医理论不会是凭空想象而生，一定是在临床观察基础之上推测验证而来，其中有的概念和现代生物医学的概念是有一定的吻合度的。但限于当时的客观条件，有的推测和今天的认识又是不一样的。有必要基于临床及客观事实厘清中医理论的基本概念。人体阳气的产生实际上和五脏皆有关系,除了上述的肾（命门），其他四藏和阳气产生也有关系。至于中医五藏和现代医学认识的关系，张启明等也有中医形态学的描述。 中医的心的功能描述实际上涉及到两方面，一是心主血脉，和现在的认识一致。二 心者，君主之官也，神明出焉。但实际上人的精神思维活动是脑，特别是大脑皮层的活动，当然心主血脉影响脑血供，也会影响脑主神明的功能。这两方面的功能符合心为五脏六府之大主的论述。强心增加器官组织细胞的供血供氧，当然可促进机体产热。而上文所述的神经内分泌系统在阳化气阴成形过程中的作用的上游是大脑皮层是心之君火。脾胃主运化水谷实际涵盖了消化系统的消化吸收功能包括肝胆胰大小肠胃[25]。脾统血未见于内经《难经。四十二难》曰：“脾……主裹血，温五脏。” “脾统血”一词，首见于明代《薛氏医案》“心主血，肝藏血，亦能统摄于脾。”，这是因为其化生的气可以影响正常的血运。脾胃消化吸收的氨基酸，游离脂肪酸，葡萄糖等即是水谷精气既可储能合成代谢变为元气和阴形物质，也可做为燃料消耗为人体提供能量，促进生命活动。肝脏无疑也包括现代所认识的肝脏，藏血量多故肝藏血，肝主疏泄调达脾胃即是植物神经系统影响胃肠功能。另外临床上肝病特别是肝脏肿瘤剧痛和长期的精神压力得不到疏泄有关。大量研究表明情志压抑过极等会影响植物神经系统,而且植物神经系统和肿瘤的发生发展相关[26],这很有可能是古人把主疏泄的功能归于肝的原因。植物神经在阳化气阴成形过程中有非常重要的作用并和肾关系密切如前所述。肝主筋，中医把神经系统病变导致肌肉痉挛中医归结为肝风内动。因此躯体运动神经的功能和中医的肝功能相关。 肺是中西医认识差别最少的。肺主气，司呼吸，肺功能强，吸入更多的氧气有助于促进机体的阳化气能量的产生。另外静功深呼吸入静也有可能促进副交感神经功能。肺主皮毛，卫外而为固和免疫系统相关，可能和呼吸道感染激发免疫系统有关。这应该也是一些调节治疗免疫性疾病的药物入所谓的肺经的原因。

3. 阳化气，阴成形的失衡及纠偏
人体阳化气和阴成形两方面的变化维持在一定的正常的动态平衡中则为生理。若失衡就会发病，所谓阴胜则阳病，阳胜则阴病。阳胜则热，阴胜则寒。各种内外在的病理因素可以扰乱这样的平衡而致病。 实际上结合上述现代生物医学认识就会发现更容易理解古人所说的有关君火，相火，阴火，肾阳，命门阳气等相关的生理病理概念。金元四大家中李东垣和朱丹溪对人体阳气及火热的生理病理变化有着深入的论述。朱

丹溪所说的动而中节的相火实际上和肝肾之阴之阳都是有着共同的生理功能基础和调节人体正常的分解合成代谢产热储热因素有关，只是表述有所差异。而所谓的壮火，妄动的相火，李东垣所述的阴火，以及阳虚，阴虚等则是产热储热功能过度或不足的病理改变。

3.1 朱丹溪相火论

朱丹溪认为世界万物包括人体都处于运动之中，而运动需要火，所谓“天主生物，故恒于动”，“人有此生，亦恒于动”，“凡动皆属火”。并且认为火有君火、相火之分。“心，君火也”， 《内经》君 火以明，“心主神明”，可见，君火是指大脑的精神思维意识活动。相火以位，贯彻心主之令，为人体生命活动所必须。丹溪说：“生于虚无，守位禀命，因其动而可见”，又说：“天非此火不能生物，人非此火不能有生”，丹溪认为相火和肝肾密切相关，与心火有关。“主闭藏者肾也，司疏泄者肝也。二脏皆有相火，而其系上属于心。心君火也，为物所感则易动”，君相之火密切合作，动而有度，推动生命活动。丹溪说：“彼五火之动皆中节，相火惟有裨补造化，以为生生不息之运用耳。”。这和我们上述的植物神经，下丘脑-垂体-靶腺轴激素之中的产热因素为人体的生命活动提供能量。即为人体产生阳气是一致的。病理情况下，若五志之火变动反常，则“五性厥阳之火相扇”，相火就会妄动，产生病理性的变化，即所谓的“煎熬真阴”，“火起于妄，变化莫测，无时不有，煎熬其阴，阴虚则病，阴绝则死”。社会生活中的人体面临各种的压力，因此是“阳常有余，阴常不足”的。

另外外他观察到湿热相火为病甚多。如《格致余论·序》：又四年而得罗太无讳知悌者为之师，因见河间、戴人、东垣、海藏诸书，始悟湿热相火为病甚多. 这和现代医学所观察到的交感神经及相关的内分泌激素等可导致水钠储留的情况是一致的。这也为六味地黄丸补阴兼利水提供了合理性依据。

所以丹溪对于阴气的保养，教人“收心养心”、“动而中节”，以免相火妄动而伤阴。又“人之阴气，依胃为养”，如“谷、菽、菜、果，自然冲和之味，有食人补阴之功”。另外也创制知柏地黄丸致相火亢甚，阴虚内热。

3.2 李东垣阴火论

李东垣创阴火论，“若饮食失节，寒温不适，则脾胃乃伤；喜怒忧恐，损耗元气。既脾胃气衰，元气不足，而心火独盛，心火者，阴火也，起于下焦，其系系于心，心不主令，相火代之；相火，下焦包络之火，元气之贼也。火与元气不两立，一盛则一负。脾胃气虚，则下流于肾，阴火得以乘其土位”。

李东垣阴火论认为阴火产生的原因是脾胃损伤，元气不足，导致心火阴火独盛,这样的因果联系依据不是太清楚，而喜怒忧愁等情志过激导致心火旺，相火代心火行事，耗伤元气。火与元气不两立。这和后来的朱丹溪所说的相火妄动的病理是有共同点的，不过丹溪更强调相火妄动伤阴。而李东垣强调伤元气。不太清楚为何说脾胃气虚，则下流于肾，阴火得以乘其土位。如果我们结合人体能量消耗储存的生物学机制如上文所述是不难看出火热可产生适度的气为生命活动所用，但过甚是耗气，所谓壮火食气， 也可伤阴的。因为如上所述人体储存能量的有形物质如糖原，蛋白质，脂肪 可以在产热因素的作用下分解产生氨基酸，脂肪酸，葡萄糖作为燃料最终在线粒体内氧化，释放能量产热是人体生命的推动力，即为人体的阳气，生理性相火。在情志过激等情况下，可是过多的消耗这些物质，这些就是人体所谓的元气和阴的重要成分。 另一方面氨基酸，脂肪酸，葡萄糖也可在合成代谢储能因素的作用下作为原料转变成蛋白质，脂肪和糖原为元气及阴形物质。

3.3 导致阳化气，阴成形失衡的因素（见附图三）。

3.3.1 阳热的产生

对于中医所说的内伤病，比如没有节制的精神情志活动致使心火动，五性厥阳之火相扇，则相火妄 动。相当于人体在应急或慢性精神压力情况下过度激活交感，肾上腺髓质并影响下丘脑，垂体靶腺轴。导致分解代谢过度。纵欲可致交感神经过度兴奋。一些食物或者药物也能过度兴奋人体。外界气温过高，会使体温升高， 此外感染性疾病在感染期间发热的诱导和维持涉及先天免疫系统与中枢和周围神经系统内神经元回路之间的紧密协调相互作用，也和交感神经有关。PGE2 被认为是发热的主要致热介质，病原微生物感染后 LPS 诱导的发热可以通过 PGE2 与下丘脑正中视前核温度调节神经元表达的 EP3 前列腺素受体结合会触发交感神经系统释放去甲肾上腺素，从而通过增加棕色脂肪组织的生热作用以及诱导血管收缩来防止被动热量损失来升高体温。 而乙酰胆碱也可通过刺激肌肉细胞引起颤抖而导致发热[27]。

3.3.2 阳虚则寒

先天禀赋不足（先天的代谢率偏低，产热因素不足）、或寒邪外伤（如桥本氏甲状腺炎导致甲状腺功能低下）、过用寒凉药物（如过用寒凉药致皮质醇功能减退[28]。该文作者报道一例面部痤疮患者，口服中药制

剂治疗，具体处方：玄参 12 g、地黄 18 g、泽泻 12 g、制何首乌 12 g、生山楂 15 g、生侧柏叶 9 g、寒水石 15 g、甘草 3 g、黄连 3 g、玉竹 12 g、羊蹄根 12 g、紫花地丁 30 g、忍冬藤 15 g 共治疗 3 周，此病例作者归结为是甘草导致肾上腺皮质功能减退， 但实际上该病人用了大量的寒凉药更有可能是原因，需要进一步的探讨，甘草主要是具有盐皮质激素样作用，每日三克的甘草不像是主要原因）、忧思过极（相火妄动日久伤元气继发阳气虚）、久病不愈损伤阳气等则会出现阳虚则寒。

3.3.3 阴虚内热

先天禀赋偏阴虚，或因五志过极、性生活不节、过服温燥，久病，等阳热甚继发伤阴，或更年期，激素水平变化，肝肾之阴不足，或过食肥甘等日久伤阴则可能出现阴虚或兼有热的情况。

3.3.4 阴甚则寒

王氏华夏中医论坛未发表文认为伤寒论厥阴病和胆碱能神经障碍高度相似。

3.4 补偏救弊，调节阴阳（见附图四）

上述的阳化气，阴成形的生理病理机制可以有助于临床养生治病时补偏救弊，如果是和阳化气不足相关的病症，就可以考虑以下的一些方法：

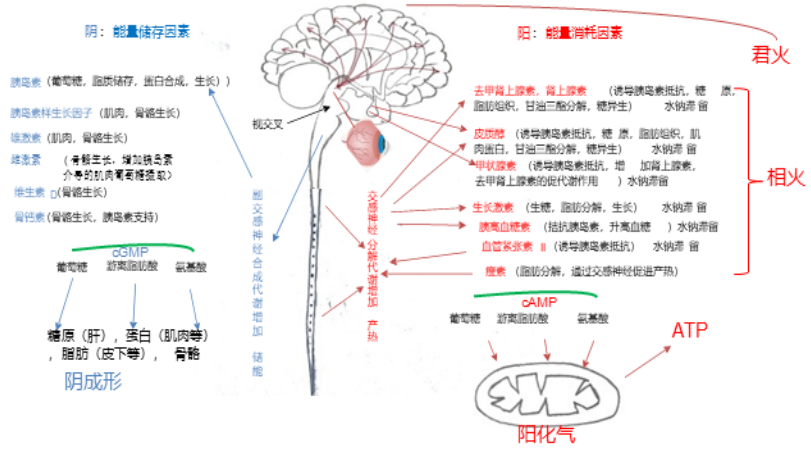
适度运动（强心肺，更好的供血供氧效率），寒冷环境保持体温，摄入足够均衡营养食物得水谷之精气，针灸致热技术。温阳益气药物比如附子兴奋交感肾上腺素能 α 及 β 受体，强心，升压，能促进分解代谢产热[29, 30]，其他含去甲乌药碱药如细辛、具有 β-受体激动剂样的广泛药理效应，有强心、升压，松弛平滑肌、增强脂质代谢和升高血糖等作用[31]. 麻黄有拟肾上腺素作用，能兴奋大脑皮层及交感神经增强分解代谢[32]。肉桂，桂枝的作用应该不是温阳助阳，桂枝汤和营卫解表，桂枝加龙骨牡蛎汤治失眠，自汗，交泰丸治失眠，苓桂术甘利水，桂枝茯苓丸软坚，肉桂引火归元，当归四逆汤通脉散寒这一系列的作用符合抑心肝火并通血脉，通阳，散热的表现。其药理基础是 桂皮醛可使皮肤血管扩张、散热增加。并有镇静、抗惊厥，降低心率，降压作用[33, 34]。因此似具有抑制交感神经的作用。人参能调节中枢神经系统兴奋过程和抑制过程的平衡。通过人参对动物脑电活动影响的研究，结果表明：其对兴奋和抑制两种神经过程均有影响，但主要加强大脑皮层的兴奋过程。实验证明：人参能促进蛋白质的合成、RNA 的合成及 DNA 的合成。相当于补元气生精作用。人参还有降血糖作用，可用于糖尿病的治疗，是促进细胞利用葡萄糖氧化产热还是促进细胞利用葡萄糖合成糖原尚不清楚，更有可能是前者。另研究表明：人参对垂体-肾上腺皮质系统有刺激作用，其有效成分是人参皂甙。因此人参益气既能助阳，也能助阴，这可能和人参类药物品种不同，炮制不同，所含的不同成分的量有差别相关[35, 36]。黄芪有促进正性心肌收缩作用，改善组织细胞的血供及代谢是其益气的药理基础，其广泛的细胞免疫促进作用是其益气固表抗邪的药理依据[37, 38]。

如果是和阳化气过亢，阴成形受损相关的病症，则可以考虑从以下几方面进行干预：修心养性，运动有度，勿纵欲，减少应激，不使相火妄动，不过食香燥之物而代以蔬菜等抗氧化保养阴之品，针刺促进副交感功能等安神定志方法助阴。 清热解毒药物：多种此类药物具有抗微生物，抗炎，免疫抑制，清热作用， 降血糖如，生地[39]，枸杞子[40, 41] 知母[42, 43]，山药[44]，山茱萸[45]，山栀[46, 47]。等，清除自由基及抗氧化，保护线粒体等，如生地黄[39]，枸杞子[40, 41]，黄柏[48]，及一些清热解毒药等，降血脂如枸杞子[40, 41]，山药[44]知母[42,43]，等。降低血浆皮质酮或抑制皮质酮诱导的细胞损伤，如生地[39]，知母[42,43]，影响雌激素，如当归[49] 等。降压如黄柏[48]，山栀[46,47]。抑制交感神经功能如知母[42,43]等。 副交感神经功能促进作用如山栀[46]等。 山药[44] 及血肉有情之品以合成蛋白，脂肪等。抗病原微生物，抑制免疫如黄连[50]，黄芩[51]，黄柏[48]金银花[52]等）。其他疏肝，清肝，镇肝药如柴胡等有镇静解热，抑制交感神经过亢等作用。

结论

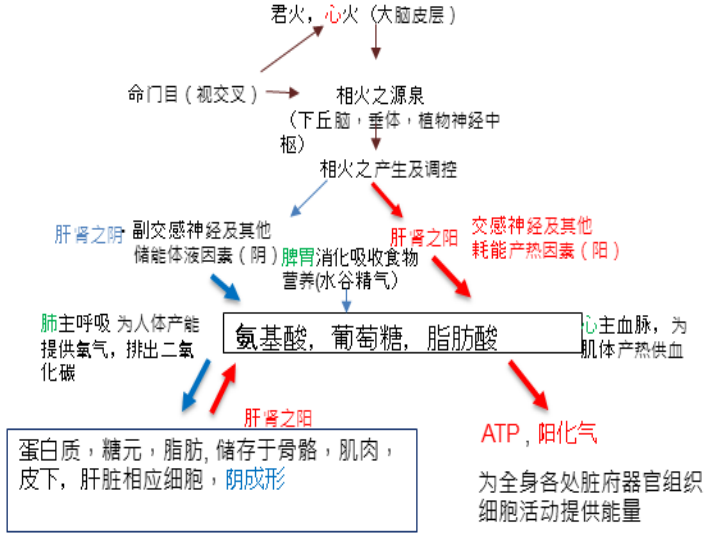
人体能量的储存和释放贯穿生命活动的始终，中医认为能量的储存和释放是由对立拮抗和依存的阴阳两方面的力量控制的，阳化气而阴成形，这有着深刻的生物医学依据。本文综述分析了这两方面机制的具体生理内涵及其病理变化及人为干预的措施。总而言之，人体的阳化气阴成形是和人体新陈代谢的分解和合成并伴随的能量的储存和释放的生物化学过程相似，不同的神经体液因素起着不同的作用。人体之气有着不同的概念，如果说人体终极的阳气是以 ATP 热能的形式表现，为各种生命活动的推动力，那么各种功能的蛋白就是相当于元气，由父母携带的基因元精所化生，元精元气是人体生命活动的本源基础，元精元气化生之元神构建了阴阳两方面的调控机制实现对人体生命活动的调节。元精元气元神离不开水谷精微之气资助，或作为分解燃料为阳化气所用，或作为合成原料为阴成形所用。人体就在动态的阴阳两方面的力量作用下维持正常生命，任何因素改变这样的力量均衡就会发生病理变化且必须要有明确可重复验证的措施纠正之。因此现代生物医学的研究的一些久经验证的真知有助于我们深刻的理解辩识历代医家对人体的认识的真知烛见和含糊不清，并指导临证实践。

图一：阳化气，阴成形的神经，体液因素



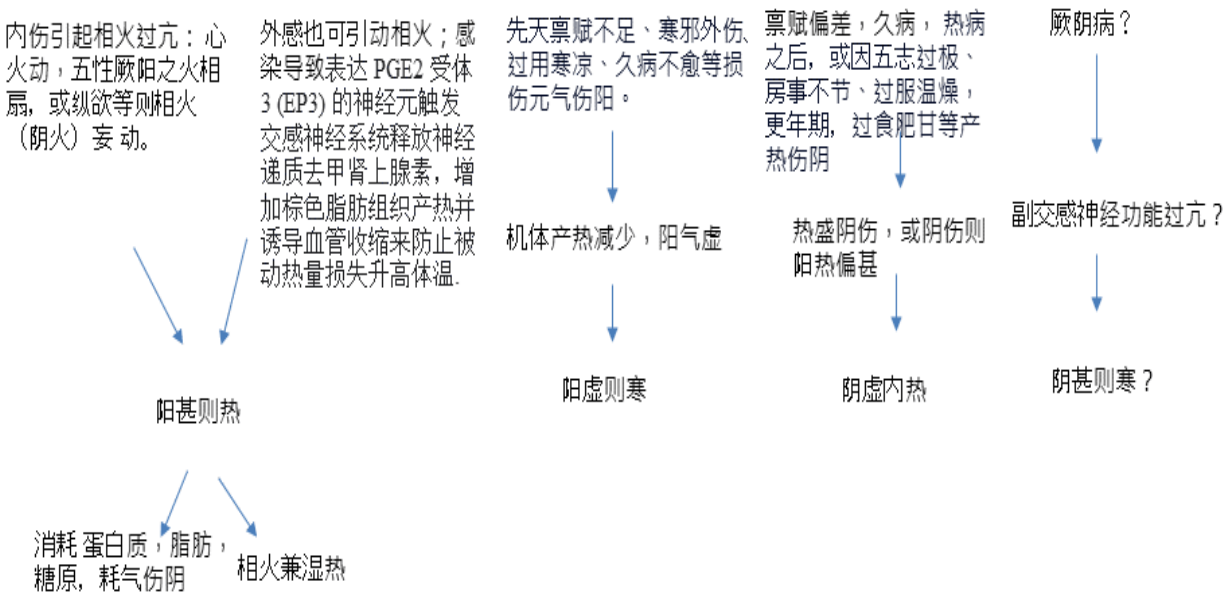
一日之中阳气化生开始于眼视网膜（命门）接受外界光，经视交叉唤醒大脑皮层（君火），并通过植物神经，内分泌系统等体液因素促进人体实现阳化气或阴成形的生命活动，交感神经及其他的一些能量消耗因素（右侧）通过第二信使cAMP，促进糖原，脂肪，肌肉蛋白等分解为葡萄糖，游离脂肪酸，氨基酸并在线粒体内氧化，产生ATP,促进机体产热.副交感神经及其他的能量储存因素（左侧），通过第二信使cGMP，促进葡萄糖，游离脂肪酸，氨基酸合成糖原，脂肪，肌肉，骨骼有形储备物质。

图二：阳化气，阴成形与五藏的关系



动而中节之相火可产生人体的正常阳气，且和五藏有关：心火（大脑皮层）为人体阳气之肇始，影响相火之源泉（下丘脑，垂体，植物神经中枢），通过肝肾之阳（交感神经及相关分解代谢释能因素）使燃料分解，也可促进阴形物质（蛋白质，糖原，脂肪）分解成燃料，并最终在细胞内化氧化分解为ATP，释放能量，促进人体生命活动，而肝肾之阴（副交感神经及相关合成代谢储能因素）可拮抗肝肾之阳使其动而中节。两者可有共同的底物，揭示两者既相互对立又互根互用。主血液循环的心脏的供血供养，肺主呼吸供氧，排二氧化碳，以及脾胃消化吸收水谷精微（葡萄糖，脂肪，氨基酸等）既可作为燃料供阳化气，也可作为原料供阴成形，这些脏之功能也和人体动而中节的相火即人体阳气产生有密切关系。

图三：阳化气，阴成形的异常



图四：补偏救弊，调节阴阳

助阳方案

适度运动（强心肺，供血供氧）
寒冷环境保温（保持体温）
摄入足够均衡营养食物（脾胃）
针灸等体表致热技术
温阳药物（麻黄，附子，细辛等，兴奋交感神经，兴奋交感肾上腺素能α及β受体，强心、增强脂质代谢,促进糖异生,升高血糖等作用，增强糖皮质激素功能），益气药（人参，黄芪）

助阴方案

修心养性，气功，深呼吸，舒缓放松音乐，宁神定志的绘画，书法等
运动有度
勿纵欲
不过食香燥，兴奋之物
针刺等安神定志方法
滋阴药（抗应激，抗氧化,降血糖，增加肝糖原储备，降血脂，增强副交感功能, 降低血浆皮质酮，血肉有情之品），益气药

清热方案
内伤病及外感病：疏肝，清肝，镇肝药
清热解毒药等（镇静，解热，抑交感神经，抗炎,抗应激，抗氧化,降血糖等）

参考文献

1. 房才龙. 论黄帝内经卫气概念即神经系统功能. 英国中医针灸杂志[J]. 2022, 29:41-45
2. Straub RH. Interaction of the endocrine system with inflammation: a function of energy and volume regulation[J]。Arthritis Research & Therapy. 2014, 16:2031
3. Bartness TJ, Shrestha YB, Vaughan CH, Schwartz GJ, Song CK: Sensory and sympathetic nervous system control of white adipose tissue lipolysis. Mol Cell Endocrinol 2010, 318:34–43.
4. Burniston JG, Ellison GM, Clark WA, : Relative toxicity of cardiotonic agents: some induce more cardiac and skeletal myocyte apoptosis and necrosis in vivo than others. Cardiovasc Toxicol 2005, 5:355–364.
5. Lowrance SA, Ionadi A, McKay E et al. Sympathetic nervous system contributes to enhanced corticosterone levels following chronic stress. Psychoneuroendocrinology. 2016 ; 68: 163–170.
6. Hinds J, Sanchez E. The Role of the Hypothalamus–Pituitary–Adrenal (HPA) Axis in Test-Induced Anxiety: Assessments, Physiological Responses, and Molecular Details. *Stresses* 2022, *2*(1), 146-155
7. 43. Darmaun D, Matthews DE, Bier DM: Physiological hypercortisolemia increases proteolysis, glutamine, and alanine production. Am J Physiol 1988, 255:366–373.
8. 44. Djurhuus CB, Gravholt CH, Nielsen S, Mengel A, Christiansen JS, Schmitz OE, Moller N: Effects of cortisol on lipolysis and regional interstitial glycerol levels in humans. Am J Physiol Endocrinol Metab 2002, 283:E172–E177.
9. Meusel M, Herrmann M, Machleidt F et al GHRH-mediated GH release is associated with sympathoactivation andbaroreflex resetting: a microneurographic study in healthy humans。Am J Physiol Regul Integr Comp Physiol317: R15–R24, 2019
10. Geary N., Smith G. Selective hepatic vagotomy blocks pancreatic glucagon's satiety effect. *Physiol. Behav.* 1983;31:391–394
11. Bernard Thorens .Neuronal regulation of glucagon secretion and gluconeogenesis. J Diabetes Investig 2022; 13: 599–607
12. Campese VM, Ye S, Zhong H. Oxidative Stress Mediates Angiotensin II–Dependent Stimulation of Sympathetic Nerve Activity. Hypertension. 2005;46:533–539
13. Pandit R, Beerens S, Adan RA. Role of leptin in energy expenditure: the hypothalamic perspective。Am J Physiol Regul Integr Comp Physiol 2017;312: 938–947
14. Hyun U, Sohn JW. Autonomic control of energy balance and glucose homeostasis. Experimental & Molecular Medicine (2022) 54:370–376
15. Barros RP, Gustafsson JA: Estrogen receptors and the metabolic network. Cell Metab 2011, 14:289–299
16. Morrison, S.F.; Nakamura, K. Central Mechanisms for Thermoregulation[J]. Annu. Rev. Physiol. 2019, 81: 285–308
17. Leach S; Suzuki K. Adrenergic Signaling in Circadian Control of Immunity[J]. Front. Immunol. 2020, 23(11):1235-1249
18. Scheer FA, Ter Horst GJ, van Der Vliet J et al. Physiological and anatomic evidence for regulation of the heart by suprachiasmatic nucleus in rats. *Am J Physiol Heart Circ Physiol.* 2001 ;280(3):1391-9
19. Warren WS, Champney TH, Cassone VM. The suprachiasmatic nucleus controls the circadian rhythm of heart rate via the sympathetic nervous system. *Physiol Behav.* 1994;55(6):1091-9
20. Jafari B (2017) Sleep architecture and blood pressure. *Sleep Med Clin* 12:161–166
21. Somers VK, Dyken ME, Mark AL et al. Sympathetic-Nerve Activity during Sleep in Normal Subjects. N Engl J Med 1993; 328:303-307
22. 秦伯未. 謙斎医学講稿・命门的初步探讨
23. 房才龙. 肾本质的多元性及心肾相交为生命的控制中心论。1990；7.硕士论文
24. 沈自尹，王文建，陈响中等.肾阳虚证的下丘脑－垂体－甲状腺、性腺、肾上腺皮质轴功能的对比观察[J].医学研究通讯,1983,10:21-27
25. 刘旭，诸剑芳，马凤歧等.脾脏实体之中西文化认知考辨[J]. 中华中医药杂志，32（4）：1478-1482
26. Claire M. Role of the autonomic nervous system in tumorigenesis and metastasis. Mol Cell Oncol. 2015，2(2): 9756431-6
27. Evans SS, Repasky EA, and Fisher DT. Fever and the thermal regulation of immunity: the immune system feels the heat . Nat Rev Immunol. 2015 ， 15(6): 335–349
28. 沈赟，周健，包玉倩. 甘草致继发性肾上腺皮质功能减退症一例[J].。中华内科杂志, 2017,56(4) : 300-301
29. 陈荣昌，孙桂波，张 强 等。附子及其复方中药的药理作用研究进展[J]。中草药 2014，45（6）；883-888
30. 左 箴, 顾科民, 杨友才, 等. 中药附子的研究 V 附子 对"脉微欲绝"病理模型的影响 [J]. 第二军医大学学 报, 1982(1): 19-23

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31. 刘美婷 ，王连媚 ，孟晶等 细辛的化学成分、药理及毒理研究进展[J]. 中国实验方剂学杂志 2023，29（10），224-234
32. 刘兴祥.麻黄的药理作用及其临床应用[J].中国中西医结合杂志 1989,(4):255-256
33. 陈一，钟正贤，黄凤娇等·。中药肉桂的药理研究：对血液及心血管系统的影响[J]。 中药通报。1985, (5): 32-3
34. 郑天昊，罗佳波。 桂枝对大鼠中枢神经系统作用的研究[J]。 中药药理与临床. 2014, 30 (4): 76-79
35. 黎 阳,张铁军,刘素香。人参化学成分和药理研究进展[J]. 中草药。2009，40（1）；164-166
36. 冯彦. 人参药理作用及临床应用研究进展[J]. 中医临床研究 2013，5（6 ）：121-12
37. 路绪文，刘晋华，陈静然.黄芪与心血管疾病。药学实践杂志 2002，20 （1 ）：3-6
38. 刘洋，华树东，贺永贵. 黄芪对心房收缩力及心房钠尿肽分泌的影响[J].中国中药杂志，2008，33（19）：2226-2229
39. 李红伟， 孟祥乐. 地黄化学成分及其药理作用研究进展[J]. 药物评价与研究， 2015, 38(2): 218-22
40. 谭真真，马丽杰， 刘颖. 基于网络药理学的枸杞子药理作用及其机制研究[J]. 中国医药导刊，2020, 22(1): 28-33.
41. 陈廷卓. 枸杞子的化学成分与药理研究进展[J]. 中医临床研究。2010，22（2）：24-25
42. 王颖异，郭宝林 ，张立军 。知母化学成分的药理研究进展[J]. 科技导报 2010，28（12）：110-115
43. 梁月华，王传社，章云津。寒凉药与温热药复方及知母对交感神经系统的作用机制探讨 [J].中药通报，1988，13（11）；48.
44. 潘景芝，孟庆龙，崔文玉，等. 山药功能性成分及药理作用研究进展[J]. 食品工业科技，2023，44（1）：420-428
45. 赵世萍 付桂香。山茱萸化学成分和药理作用的研究进展[J].《中草药》 1997，3：187-188
46. 张世芳，刘月盈，林贤琦，等. 栀子的药理作用 [J]. 药 学学报，1965，7(10): 636-641
47. 史永平 ，孔浩天 ，李昊楠 等。栀子的化学成分、药理作用研究进展及质量标志物预测分析[J]. 中草药 2019，50（2）：281-289
48. 李嘉诚，吴 岚，蔡同凯等.黄柏化学成分及其药理作用研究进展[J]. 药学实践杂志 2018；36（5）：389-391，398
49. 朱迪娜，王 磊，王思彤等. 植物雌激素的研究进展[J]. 中草药；2012（43）；1422-1429
50. 盖晓红，刘素香，任涛. 黄连的化学成分及药理作用研究进展[J]. 中草药 2018,49(20):4919-4927.
51. 张晶， 徐明远， 李凤霞 等. 黄芩活性成分与药理作用研究进展[J]. 植物学研究， 2023， 12(3): 170-17
52. 徐晖.金银花药理作用研究进展[J]. 湖南中医杂志,2013，(9):148-150.

由 ATCM 承办的 2024 年世界针灸学会联合会（世针联）年会
暨国际针灸学术大会将于明年金秋季节在英国隆重举行，
同时这将是 ATCM 成立三十周年的庆典之际，为双喜临门之时！
目前各项筹备工作正在紧锣密鼓地进行中。
我们诚挚邀请大家多多关注和支持这一盛会，
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子午流注纳甲法撮要

周继成

纳甲法又称纳干法，是日时同计的十二正经时辰流注针刺法。这种寻求与日干同名时干的方法实际上应该是“年中用月，月中用日，日中用时”思想的体现，同理可知，纳支法也应如此。

现代人对于纳甲法的定时开穴感到很困惑，于是研发了软件开穴，纳甲盘开穴，但是这些都代替不了人工查找开穴，因为治病需要辨证。古人由于使用甲子纪时，对于纳甲开穴是很简单的事，因为计算时辰很熟悉，现代人对于甲子纪时不熟悉，不知道如何推算，或者不知道如何简单推算，于是纳甲开穴法很少人使用，当然并不是说这个方法就是十分完美的法门，相反的，个人认为纳甲法是一个能量引信，当然也可以作为治疗正法使用。

这个理论涉及到古代天文学的一些观念，比如天罡开阖，三甲开阖的观念等，这些术数的理论，这里不便阐述。

1. 基本原则

1. 日天干值日对应的经络，阳干值日在阳经，阳时辰取穴，阴干值日在阴经，阴时辰取穴

甲胆乙肝丙小肠，丁心戊胃己脾乡；
庚是大肠辛属肺，壬系膀胱癸肾藏；
三焦亦向壬中寄，包络同归入癸乡

2. 经生经穴生穴

意思是甲木生丙火，丙火生戊土，以此类推，穴生穴，阳井金生阳荥水，阳荥水生阳俞木，阴经照此类推。

3. 返本还源

返本还原的本，指值日经；原指值日经的原穴，凡是遇到开俞穴的时候，必须同时开值日经的原穴，例如胆经值日戊寅时开胃经木穴陷谷，同时加胆经的原穴丘墟

4. 气纳三焦，血归包络

气纳三焦，是指阳干日的第六个时辰，也就是日干重见，要到三焦经的五腧穴中找到“他生我”的穴位。以胆经值日为例，胆经属木为“我”，生我者水，所以要找三焦经的荥穴液门。

血归包络，是指阴干日六个时辰，天干重见的时刻，要到心包经的五腧穴中寻找“我生他”的穴位，以肝经值日为例，第六个时辰乙未，找到心包经五腧穴中找到“我生他”的荥穴劳宫穴。

5. 天干数十，地支十二。十与十二相配，就变成天干顺序向前、地支挨次后退。天干为阳，故名“阳进”，地支为阴，故名“阴退”。根据阳进阴退的道理，天干取甲(甲为天干第一字)，地支取戌(戌为地支阳时最后一字)，阳进阴退而变化生，故甲日甲戌时与胆经窍阴穴相配。甲日由子时起就违背了阳进阴退的规律，所以甲日由甲戌时起，而不由甲子时起，其道理就在此。

《针灸大成》徐氏论子午流注法：阳干注腑，甲丙戊庚壬而重见者气纳于三焦；阴干注藏，乙丁己辛癸而重见者，血纳包络。

《针灸大成》流注开阖：相生相合者为开，则刺之。相克者为阖，则不刺。阳生阴死，阴生阳死，如甲木死于午，生于亥。乙木死于亥，生于午。丙火生于寅，死于酉。丁火生于酉，死于寅。戊土生于寅，死于酉。己土生于酉，死于寅。庚金生于巳，死于子。辛金生于子，死于巳。壬水生于申，死于卯。癸水生于卯，死于申（这段话，可以参看后面的附图）。凡值生我我生，及相合者，乃气血生旺之时，故可辨虚实刺之。克我我克，及阖闭时穴，气血正直衰绝，非气行未至，则气行已过，

《针灸大成》流注时日：阳日阳时阳穴，阴日阴时阴穴，阳以阴为阖，阴以阳为阖。阖者，闭也。闭则以本时天干，与某穴相合者针之。

阳日阳时已过，阴日阴时已过，遇有急疾奈何？曰：夫妻子母互用，必适其病为贵耳。

妻闭则针其夫，夫闭则针其妻，子闭针其母，母闭针其子。必穴与病相宜，乃可针也。

《针灸大成》流注图：

足少阳胆之经，甲主，与巳合，胆引气行。

甲日，甲戌时开胆为井金。
丙子时，小肠荥水。
戊寅时，胃俞木，并过胆原丘墟，木原在寅。
庚辰时，大肠经火。
壬午时，膀胱合土。
甲申时，气纳三焦之荥水，甲属木，是以水生木，子母相生。

足厥阴肝之经，乙主，与庚合，肝引血行。

乙日，乙酉时开肝为井木。
丁亥时，心荥火。
己丑时，脾俞土，并过肝原。
辛卯时，肺，经金。
癸巳时，肾，合水。
乙未时，血纳包络之荥火，乙属木，是以木生火也。

手太阳小肠经，丙主，与辛合，小肠引气行。

丙日，丙申时开小肠井金。
戊戌时，胃荥水。
庚子时，大肠俞木，并过小肠原。
壬寅时，膀胱经火。
甲辰时，胆合土。
丙午时，气纳三焦之俞木，丙属火，是以木生火也。

手少阴心之经，丁主，与壬合，心引血行。

丁日，丁未时开心为井木。
己酉时，脾荥火。
辛亥时，肺俞土，并过心原。
癸丑时，肾经金。
乙卯时，肝合水。
丁巳时，血纳包络之俞土，丁属火，是以火生土也。

足阳明胃之经，戊主，与癸合，胃引气行。

戊日，戊午时开胃为井金。
庚申时，大肠荥水。
壬戌时，膀胱俞木，并过胃原。
甲子时，胆经火。
丙寅时，小肠合土。
戊辰时，气纳三焦之经火，戊属土，是以火生土也。

足太阴脾之经，己主，与甲合，脾引血行。

己日，己巳时开脾为井木。
辛未时，肺荥火。
癸酉时，肾俞土，并过脾原。
乙亥时，肝经金。
丁丑时，心合水。
己卯时，血纳包络之经金，己属土，是以土生金也。

手阳明大肠经，庚主，与乙合，大肠引气行。

庚日，庚辰时开大肠井金。
壬午时，膀胱荥水。
甲申时，胆俞木，并过大肠原。
丙戌时，小肠经火。
戊子时，胃合土。
庚寅时，气纳三焦之合，土庚属金，是以土生金也。

手太阴肺之经，辛主，与丙合，肺引血行。

辛日，辛卯时开肺为井木。
癸巳时，肾荥火。
乙未时，肝俞土，并过肺原。
丁酉时，心经金。
己亥时，脾合水。
辛丑时，血纳包络之合木，辛属金，是以金生水也。

足太阳膀胱经，壬主，与丁合，膀胱引气行。

壬日，壬寅时开膀胱井金。
甲辰时，胆荥水。
丙午时，小肠俞木，所过本原京骨木原在午，水入火乡，故壬丙子午相交也，兼过三焦之原阳池。（三焦亦向壬中寄）
戊申时，胃经火。
庚戌时，大肠合土。
壬子时，气纳三焦井金。

足少阴肾之经，癸主，与戊合，肾引血行。

癸日，癸亥时开肾为井木。
乙丑时，肝荥火。
丁卯时，心俞土，并过肾原太溪，又过包络原大陵。（包络同归入癸乡）
己巳时，脾经金。
辛未时，肺合水。
癸酉时，血纳包络之井木，谓水生木也。

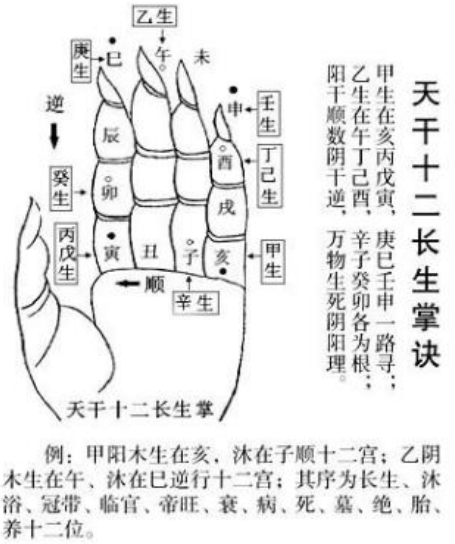
通过以上图例可以发现一个规律：十二经井穴的开穴（不包括三焦经和心包经）时间是时干名和日干名相同，因此就可以用五鼠诀，在手掌上很容易找到这个时辰。

由甲戌到癸酉，然后接甲戌

甲戌-甲申 乙酉-乙未 丙申-丙午 丁未-丁巳 戊午-戊辰 己巳-己卯 庚辰-庚寅 辛卯
壬寅-壬子 癸亥-癸酉，这个顺序由于受阳顺阴逆的观点限制，起点从戌开始而不是从甲子开始，从而导致，壬子之后不能从癸丑开始，而从六癸的下一句癸亥开始，否则回不到癸酉，由此不能回到甲戌。

2. 时辰推算

六十甲子表
甲子 乙丑 丙寅 丁卯 戊辰 己巳 庚午
辛未 壬申 癸酉
甲戌 乙亥 丙子 丁丑 戊寅 己卯 庚辰
辛巳 壬午 癸未
甲申 乙酉 丙戌 丁亥 戊子 己丑 庚寅
辛卯 壬辰 癸巳
甲午 乙未 丙申 丁酉 戊戌 己亥 庚子
辛丑 壬寅 癸卯
甲辰 乙巳 丙午 丁未 戊申 己酉 庚戌
辛亥 壬子 癸丑
甲寅 乙卯 丙辰 丁巳 戊午 己未 庚申
辛酉 壬戌 癸亥



例：甲阳木生在亥，沐在子顺十二宫；乙阴木生在午、沐在巳逆行十二宫；其序为长生、沐浴、冠带、临官、帝旺、衰、病、死、墓、绝、胎、养十二位。

掌上查找开穴时辰很容易，首先要知道日干支（可以网上查到），然后根据五鼠诀找到当天子时的干支，比如甲申日，根据五鼠诀，甲己还加甲，那就是甲子，在手掌上依次数出后面各个时辰的干支就可以了，那么如果是胆病，正好又是甲日，需要泻就用输穴，甲戌为井金，其次丙子荥，戊寅输，就是第二天寅时胃经的输穴，同时配合胆经的原穴丘墟。再比如乙酉日，乙日属阴木，对应肝，如果是肝气郁结，气血郁滞，需要泻肝，可以用荥穴，乙庚日是丙子时，丁丑，戊寅，。。。乙酉时开肝井穴，丁亥时，心荥火，取心经荥穴少府。
这个只要在手上演示一下，就会明白，非常简单。

五鼠诀：

甲己还加甲，乙庚丙作初，丙辛从戊起，丁壬庚子居，戊癸何方发，壬子是真途。
意思是说，甲日己日的子时都是甲子，乙日庚日的子时都是丙子，丙日辛日子时都是戊子，丁日壬日的子时都是庚子，戊日癸日的子时都是壬子。

除了胆经没有用甲子而用甲戌，癸亥替代癸丑以外，其他的各经都是用本经第一个日干开头的时干支，然后在手上就可以找到下一个开穴的时辰，天干重见也很容易找到，就不需要用子午流注盘了，也比子午流注软件方便。
找到开穴的时辰后，实际上只需要看时辰的地支，就知道几点开什么穴位，说破了真的很简单。

针药并用治疗头汗症一例分析

朱沛

Abstract: Sweating is something extremely common and prevalent in people of all age as it is a typical bodily function to regulate temperature; But if you suffer from excessive sweating on your head or scalp all the time, then it can be due to a medical condition. It is called craniofacial hyperhidrosis which is not a very severe illness but could make people very uncomfortable and bring down the life quality. Hyperhidrosis on the scalp could be caused by many reasons including stress, anxiety, heat, spicy foods, hormones, excessive workout and neurological disorder etc. There are some treatment options available such as oral medications and operations like sympathectomy, but they may have a variety of different side effects. Here we successfully treated a case of craniofacial hyperhidrosis who was suffering head sweating for about 20 years with acupuncture and herbal treatment. Especially acupuncture showed great effectiveness in reducing sweating and the herbal treatment balancing the body's *yin* and *yang* further to prevent the symptom from attacking again.

Key words: Craniofacial hyperhidrosis, acupuncture, herbal treatment

头汗症，作为临床上常见的一个症状，虽然不是大病，但是给患者的日常生活带来诸多烦恼。现分享一例顽固性头汗症患者，经针药并用短暂治疗就取得了十分满意的效果，报告如下，仅供同道借鉴参考。

患者男 ，75 岁，英国白人，于 2022 年 6 月 2 日初诊，述头部出汗近 20 年，一年四季出汗不止，没有间断，曾找 GP 多次就诊，没有得到解决方案。并且 GP 告诉他说，这种病是治不好的，不要再找他们看了，他们也提供不了更多的帮助。患者既往体健，头汗出的同时伴有双侧上肢汗出，双足冰凉，口干，乏力，睡眠一般，易醒，饮食二便均正常。舌尖红，舌苔白舌根稍腻，脉沉弦。

辩证：上热下寒，心肾不交，水火不济，气阴两虚。

取穴：左侧外关，右足临泣，右内关，左公孙，左三阴交，右足三里，脐针水火既济及震卦。

用药：黄连上清丸，生脉饮

当时进针十几分钟后，入诊室查看，发现枕头上面床纸已经浸湿，当用手触及额头及上肢皮肤时发现皮肤并无潮湿并且已经干燥。患者感到非常平静和放松。50 分钟起针后，头汗止，上肢皮肤干燥。嘱其服用上药，以巩固疗效。因病久，恐病情反复，嘱其下周继续针灸巩固治疗。当时患者并未预约。因病久疑虑过重，想进一步观察，看看过后情况怎么样。

6 月 14 号，患者非常高兴地前来告知，自从上次针灸治疗后，未有明显汗出，效果十分显著。仅有一次搬重物时有头部汗出，后未再发生，并且双足感到开始变暖，不像以前冰冷。述服用上药后口干明显减轻，精力较前改善。主动要求取上药各一瓶续服服用。并预约后天再来针灸。查其舌苔舌尖仍红，舌苔薄白。脉缓滑有力。

6 月 16 号复诊，诸症稳定，无明显头汗出，双上肢皮肤干燥。睡眠精力均改善。特意查看当天气温 18 度。针灸选穴同上，效不更方，巩固治疗。

讨论

关于头汗症，现代医学认为其发病原因与交感神经的过度兴奋有关。目前尚无效果满意且副作用小的药物治疗。较为流行的治疗方法就是手术，通过切断胸 2（T2）交感神经或者第二、第三肋骨表面交感神经链（R2，R3）来缓解或消除头汗症状。虽然大部分患者术后效果显著。但其术后副作用愈发明显而不容忽视。大多数患者表现为代偿性出汗，躯干和双脚出汗明显增多，个别患者甚至出现术后眼睑下垂等症状。

中医对该病的认识早在汉代张仲景的《伤寒论》里就有关于“头汗出”的辩证和相应治疗方剂。尤其提到阳明病中，“但头汗出”证较多，有热扰胸膈的栀子豉汤，热盛伤阴，火热上炎，阴液不足的白虎加人参汤。湿热发黄证中，由于湿热上蒸，不能外散而引起的“但头汗出”，而身无汗的茵陈蒿汤证。以及少阳枢机不利，水道不畅，阳气不能宣达全身，反蒸于上而致头汗出的柴胡桂枝干姜汤证等。以上论述为后世医家对头汗症的辩证和治疗提供了重要的参考和指导依据。而现代中医对该病的认识不外乎上焦热盛，中焦湿热，以及虚阳浮越，津随阳泄所导致。

本例患者因病久而致虚实夹杂，既有热盛于上，阳气浮越，逼津外泄，又有久病耗气伤阴，气阴两虚。心火不能下降入通于肾，肾水不能上升上济于心，导致水火不济而相分离，上热下寒。因此针对本例患者治疗采取针药并用，以针为主，并且起到了关键作用，然后辅助药物治疗，取得了很好的疗效。针灸取穴首先以八脉交会穴之外关、足临泣泄三焦肝胆之热，用泻法。内关，公孙主治心胸胃，既可以镇静安神又可以健脾益气，用补法。再加上三阴交足三里，既能养阴，又可助阳。脐针水火既济使心火下降，肾水上升，心肾交通，各归其位。震以清肝火来泄心火。所以针入十几分钟，头汗出明显得以缓解并逐渐停止。针后辅以黄连上清丸清心火，泄上焦热。生脉饮以补气养阴敛汗。针药并用，相得益彰，疗效满意。

参考文献

【1】 陶兰亭，黄桃，《伤寒论》中“但头汗”

Acupuncture at the Siguan Points (Bilateral LI4 and LR3) with Daoyin in delayed-onset muscle soreness: a study protocol for a randomized controlled trial

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([#]Yi Xiao and Xuan XU contributed equally to this manuscript)

Abstract

Background: Delayed-onset muscle soreness (DOMS) caused by eccentric exercise may change muscle function. Acupuncture at the Siguan points is a classical therapy to relieve pain and regulate *qi* and blood. *Daoyin* is an ancient way of physical fitness and rehabilitation in Traditional Chinese medicine (TCM), so this study aims to evaluate the effect of acupuncture at the *Siguan* points with *Daoyin* to reduce pain and improve muscle function.

Objective: This study is a completely randomized controlled design clinical trial. Thirty-six healthy male adults will be recruited and assigned randomly to the acupuncture with *Daoyin* group, sham acupuncture with *Daoyin* group, and observation group in a ratio of 1:1:1. The subjects will perform five sets of leapfrogs to induce DOMS on the first day, then undergo treatment for three days and observed for another three days. The primary outcome is pain intensity, with thigh circumference, pain threshold, and blood serum secondary outcomes. The study duration is seven days.

Discussion: This will be the first trial to assess the effect of acupuncture with *Daoyin* on exercise-induced muscle soreness, and it is anticipated that the findings will provide valuable information to determine the clinical effects of this therapy strategy on DOMS.

Trial registration: Chinese Clinical Trial Registry (CHICTR), ChiCTR2200057335. Registered on 8 March 2022.

Keywords: Delayed-onset muscle soreness, acupuncture, Siguan, Daoyin

Background

Regular physical activity reduces the risk of many diseases, including reducing obesity, improving heart and lung function, and maintaining muscle mass. [1] However, excessive or unfamiliar exercise can cause delayed onset muscle soreness (DOMS), a type of muscle soreness that occurs 12 to 48 h after high-intensity eccentric exercise and typically resolves spontaneously in 5 to 7 days. [2] The mechanism of DOMS is unclear, but many theories have been suggested, including the muscle damage theory, lactate theory, spasm theory, and inflammation theory. [2-6] Many treatments have been proposed to alleviate the symptoms, including cold therapy, compression therapy, low-intensity exercise, physical therapy, and acupuncture. [7-11] However, there are differences in the treatment effects and effectiveness. [12-14]

Traditional Chinese medicine (TCM), including acupuncture, massage, and cupping has been used for sports injuries. [15-17] In particular, the analgesic effect of acupuncture has been proven. [18] Moreover, studies have demonstrated that exercise, though a cause of injury, can promote injury repair, [5] in line with the *Daoyin* of TCM. Therefore, this study innovated the combination of acupuncture and *Daoyin* to explore its clinical efficacy on DOMS.

The *Siguan* points bilateral LI4 (*Hegu*) and LR3 (*Taichong*) were selected to facilitate the local movement of the limbs. LI4 and LR3 are the source points of the large intestine meridian of Hand *Yangming* and THE liver meridian of Foot *Jueyin*, respectively, which are used to reconcile *qi* and blood. [19] Acupuncture at the *Siguan* points is believed to treat various diseases via opening up and activation of the "four gates of vital energy", including mental and gastrointestinal disorders, primary dysmenorrhea, migraine, etc. [20-23] The *Siguan* points also alleviate muscle pain [24], and the functional projection of that in the brain is very extensive, so this acupoint pair is widely used clinically. [25]

TCM *Daoyin* is a way to adjust one's spirit, and unlike normal sports exercise, it contains two aspects, body movement and breath, such as *Mawangdui Daoyin*. It has played an essential role in TCM health preservation and disease rehabilitation. [26] In DOMS, *Daoyin* to the affected limb promotes skeletal muscle metabolism and repair. [27]

This study aims to: (1) assess the therapeutic effect of acupuncture *Siguan* with *Daoyin* to relieve DOMS symptoms; (2) further explore the acupuncture strategy with exercise for treating DOMS.

Methods

Study design

This randomized clinical trial will be conducted at the Hunan University of Chinese Medicine. Thirty-six healthy male adults will be recruited through posters. Subjects who volunteer to participate in the study and provide written informed consent will undergo a screening evaluation to determine eligibility. All participants will be randomly divided into the acupuncture with *Daoyin* group, sham acupuncture with *Daoyin* group, and the observation group in the ratio of 1:1:1 according to a random number table. The study will last seven days (Figure 1). On the first day, subjects will perform frog jumps to induce DOMS; then, they will be treated or observed for three days and observed for another three days (Table 1).

Participants

The inclusion criteria

The inclusion criteria are as follows: 18-30 years old; no exercise regularly or vigorously for nearly two weeks; no discomfort in lower limbs at the time of enrollment; able to receive acupuncture treatment.

The exclusion criteria

The exclusion criteria are as follows: a history of cardiovascular and respiratory diseases; a history of serious disease of the lower limb motor system; a history of lower limb vascular diseases; other life-threatening uncomfortable symptoms that may occur after strenuous exercise.

The elimination and drop-out criteria

The elimination and drop-out criteria include cardiovascular and respiratory system discomfort during the experiment, failure to induce DOMS after exercise training, failure to complete follow-up training as required, or engaging in behavior that interfered with the results; voluntarily quitting.

Exercise protocol for inducing muscle soreness

Frog jumps will be used to induce DOMS. On the first day, volunteers who met the inclusion criteria will perform five sets of frog jumps, 50 meters per set, with 2–3 min rest between sets. The quality of the frog jumps will be supervised by specially-assigned researchers to ensure standard movement. Subjects whose VAS≥3 at 24 h will be included in the analysis.

All subjects will receive a labor fee and be informed not to participate in sports, massage, or other mitigation measures during the experiment. If the pain is unbearable, inform the experimenter.

Sample size calculation

As this therapy is a special strategy, no clinical trial has evaluated the efficacy of acupuncture *Siguan* with *Daoyin* on DOMS. Therefore, this is a pilot study for this therapy, and it is difficult to calculate the sample size. The optimal sample size is 15 subjects per treatment arm for the standardized effect size with 90% power and two-sided 5% significance. [31] Considering its practicability, 12 people per group is the best for implementation.

Blinding

The participants will be blinded to their experimental grouping, and the sham acupuncture used in this trial guarantees a good blinding effect. However, none of the acupuncturists involved in this trial can be blinded to the assignment because of the acupuncture characteristics. The assessors and statisticians for data collection and analysis will also be blinded to the assignments. In addition, participants will be asked to answer the following question during week 4 to test the blinding effect: 'Do you think you have received real acupuncture treatment?' to determine whether the blinding was sufficient.

Intervention

Acupuncture with Daoyin group

The treatment group is the Acupuncture *Siguan* with *Daoyin*. This group will receive the treatment thrice, from the day after the exercise once a day, 30 min per session as follows (Figure 2):

Acupoint location: LI4 is located at the radial side of the midpoint of the second metacarpal, between the first and second metacarpal of the hand. LR3 is located at the depression in front of the joint of the phalanges, between the first and second phalanges.

Step 1: The subject is in a supine position, and acupuncture is performed at the *Siguan* points to obtain *qi*.

Step 2: The subject is instructed to take a slow deep breath and is manipulated with a high-intensity lifting-thrusting method during exhalation. The amplitude of acupuncture is about 0.5 cm, lasting for 3 s. The process is repeated thrice at each point.

Step 3: After the manipulation, the subjects are assisted in exercising the quadriceps femoris muscle of the lower limbs. The subject is instructed to fix the hip and raise the lower limb slowly without bending the knee, holding for 5 seconds at the highest point. The process is repeated thrice on each leg.

Step 4: Then, slight resistance is applied to the lower limb while lifting the leg, and the process is repeated thrice on each leg.

Step 5: Finally, the performer applies the resistance but keeps the lower limbs unable to lift, forming a static movement for 5 seconds. The process is repeated thrice on each leg.

Step 6: The subject is instructed to take a lateral position and bend the knee of the upper leg. The performer holds the subject's ankle with one hand and fixes the hip with the other, making the foot as close as possible to the hip so that the subject feels a stretch in the front of the thigh. This is repeated thrice on each leg, being careful not to touch the needles in the hands and feet during the process.

After all the operations, repeat the above steps. The treatment process is displayed in Figure 3.

Sham acupuncture with Daoyin group

The sham acupuncture involves four non-acupoints away from the relative meridians 1 inch next to the LI4 and LR3 points (the distribution of acupoints is illustrated in Table 2 and Figure 4). The subjects will undergo shallow puncture, that is, about 3 mm into the skin, as this process is better for blinding. No manipulations will be performed, and there will be no attempt to induce '*de qi*' sensation. The other guidance steps, treatment time, and frequency are the same as those in the acupuncture group.

Observation group

The subjects in this group will not receive any treatment.

Outcome measures

Primary outcome: Pain intensity

The pain intensity will be assessed using the visual analog scale (VAS) score, a widely used measure of pain intensity, determined on a 100-mm horizontal line, where 0 indicates "no pain" and 100 indicates "the worst imaginable pain". [28] Subjects indicate the level of subjective pain according to what they felt, and the researchers record the scores. The VAS is believed to have a higher degree of precision in pain assessment. [29] The pain intensity will be measured before the exercise, immediately after the exercise, and every 24 h for seven days after the exercise (nine times in total).

Secondary outcomes

Thigh circumference: The circumference around both legs will be measured at the level of the midpoint of the total length of the thigh, horizontally to the ground, to obtain a constant reference point. [30] The thigh length is the distance from the junction of the rectus femoris muscle and the inguinal point to the midpoint of the upper edge of the patella. The midpoint of the thigh is the best position to measure leg circumference. After marking the point with a pen for repeatability, the same measurer will use the same tape to repeat the measurements. The average value will be calculated after measuring thrice consecutively.

Pain threshold: The pain threshold will be measured using a digital algometer (model FPX25, Wagner Instruments, Greenwich, CT, USA) at the midpoint of the thigh, at which the rubber tip will be pressed perpendicularly into the muscle with a consistently increasing force. The values will be obtained when the subject indicates the onset of pain. Each leg will be measured thrice after brief resetting times, with the average value used for further analysis. The pain threshold will be measured after measuring the calf circumference to prevent the impact of pressure. The thigh circumference and pain threshold will also be measured before the exercise, immediately after the exercise, and every 24 h for seven days after the exercise (nine times in total).

Blood Serum: Venous blood samples will be collected to assess muscle damage, analgesia, and inflammation. Serum creatine kinase (CK) will be used to assess muscle damage, blood lactic acid (BLA) and lactate dehydrogenase (LDH) will be used to assess lactic acid metabolism while norepinephrine (NE) will be used to assess the metabolism. β-endorphin (β-EP) will be measured to evaluate the analgesic level, and interleukin-6 (IL-6) to assess inflammation. A 4 ml sample of elbow venous blood will be collected and centrifuged at 3500 RPM for 10 mins to obtain the serum. The samples will be stored at -80 °C and analyzed at the end of the study. Considering the tolerance of the subjects, venous blood will be collected before the exercise, immediately after the exercise, and every 24 h for three days after the exercise (five times in total).

Adverse events and safety assessment

This method of induction is a short period of high-intensity exercise which may cause adverse events such as hypoglycemia and rhabdomyolysis; therefore, the tolerance of the volunteers will be monitored by the researchers during the induction. If they feel uncomfortable, they will immediately stop exercising, rest and replenish fluids.

The feeling of acupuncture *Siguan* is strong, so there may be a faint or excessive needle sensation during the acupuncture; therefore, the participants will be advised to rest and avoid acupuncture when they are hungry and tired. Any adverse events throughout the trial will be recorded and categorized as related to the treatment.

Ethics

This study has been approved by the Ethics Committee of the Second Affiliated Hospital of Hunan University of Chinese Medicine (2022-KY-004).

Statistical analysis

All data will be analyzed using SPSS (version 26.0; IBM Corp., Armonk, NY, USA). The significance level will

be set at 0.05 in a two-tailed test. All continuous data will be presented as mean and 95% confidence intervals (CIs). Categorical data will be reported as frequencies and percentages. The baseline characteristics of the study subjects will be presented using a descriptive analysis for each group. The primary outcome will be the differences in the VAS score measured at various intervals from 0 to 7 days after exercise among the three groups. A mixed-effects model for repeated measures (MMRM) will be used to assess differences along with the time effect. Dunnett's test will be used for multiple comparisons. The results of the secondary effective analysis will be analyzed using the same method as for the primary outcome in the case of continuous variables with time variation. Categorical data will be analyzed using the chi-square or Fisher's exact test.

Data management and monitoring strategies

All original documents, including informed consent, questionnaires, and worksheets, will be collected per standard operating procedures. All data files will be supervised by a dedicated research assistant and will not be tampered with. An independent clinical research assistant will monitor the process to determine whether the trial follows protocol.

Protocol amendments

Any significant protocol revisions will be submitted to the Ethics Committee of the Second Affiliated Hospital of the Hunan University of Chinese Medicine for approval. After obtaining approval, the changes will be updated on CHICTR.

Discussion

The mechanism of DOMS has been studied for years showing that eccentric exercise or/and not familiar sporting activities lead to mechanical damage of skeletal muscle tissue. [32] Metabolic disorders caused by injury induce a local calcium overload and metabolite accumulation, which affects muscle recovery. [33] Inflammation is also involved in pain induction pain. [34-35] Therefore, based on the pathophysiological changes and symptoms, the clinical treatment strategy is to relieve the symptoms of muscle pain, promote soft tissue repair and improve the metabolic environment to restore muscle function. [5]

There are various analgesic treatments available, including acupuncture which is regarded as low-cost and low-risk, with few side effects. [18] Acupuncture can relieve pain by promoting the release of endogenous neurotransmitters such as opioids [18,36] as well as increasing the blood flow to skeletal muscles to remove painful substances. [37] Therefore, the *Hegu* and *Taichong* acupoints with strong needle sensation not only have an analgesic effect but also induce a temporary stress state, providing a better metabolic environment. It is more important to provide the basis of pain relief for *Daoyin*.

Skeletal muscle damage can repair itself to some extent, [38] with myogenic and satellite cells playing an important role in skeletal muscle repair. [39] These cells can be activated by force pulling, [40] that is, applying stress locally accelerates skeletal muscle repair. Local limb movements include muscle contraction and stretch acceleration repair, [27] which coincide with the TCM *Daoyin*, which includes body and breathing movements. Therefore, the *Siguan* points were selected to relieve pain, and as they are located in the extremities, they do not affect limb movement. The subjects were subjected to strong manual stimulation while exhaling to induce the stress state and speed up a gas exchange in the body. In this way, metabolism and energy utilization increase to accelerate the discharge of metabolic waste. Moreover, serum indicators will be detected to verify the mechanism

Based on disease pathophysiology, this protocol proposes the combination of acupuncture and TCM *Daoyin*, which has the characteristics of TCM, and a randomized controlled trial was designed to investigate the clinical efficacy of this treatment strategy.

Trial status

The recruitment of patients for this clinical trial, which started in March 2022 and ended in December 2022, is now entering the clinical intervention phase.

Registration

The trial was registered in the Chinese Clinical Trial Registry on 8 March 2022 (registration number: ChiCTR2200057335).

Abbreviations

AE: Adverse event; DOMS: Delayed-onset muscle soreness;

VAS: Visual analog scale; CK: Creatine kinase; BLA: Blood Lactic Acid;

LDH: Lactic Dehydrogenase; NE: Norepinephrine; β-EP: β-endorplhin;

IL-6: Interleukin-6.

Declarations

Ethics approval and consent to participate

Ethics approval was granted by the Ethics Committee of the Second Affiliated Hospital of Hunan University of Chinese Medicine (2022-KY-004).

Consent for publication

All authors read and approved the final manuscript. Written informed consent was obtained from the patient to publish this case report and any accompanying images. A copy of the written consent is available for review by the editor of this journal.

Availability of data and materials
The results of this trial will be presented in peer-reviewed journals.

Competing interests
The authors declare that they have no competing interests

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Author Contributions
YX planned the study protocol and drafted the manuscript. ZYL recruited and screened volunteers on campus. HLH was responsible for random allocation. PTD is in charge of the collection of clinical data. XX carried out the intervention of subjects. HLH was the study coordinator. HZ participated in designing the trial and helped to prepare the manuscript. ML managed the study. All authors read and approved the final manuscript.

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All authors are affiliated with the School of Acupuncture-Moxibustion Tuina and Rehabilitation,

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Ethics approval and consent to participate
Ethics approval was granted by the Ethics Committee of the Second Affiliated Hospital of Hunan University of Chinese Medicine (2022-KY-004).

References

[1] Febbraio MA. Exercise metabolism in 2016: Health benefits of exercise - more than meets the eye!. Nat Rev Endocrinol. 2017;13 (2):72-74.
[2] Hotfiel T, Freiwald J, Hoppe MW, et al. Advances in Delayed-Onset Muscle Soreness (DOMS): Part I: Pathogenesis and Diagnostics. Sportverletz Sportschaden. 2018;32 (4):243-250.
[3]Proske U, Allen TJ. Damage to skeletal muscle from eccentric exercise. Exerc Sport Sci Rev. 2005;33 (2):98-104.
[4]Botek M, Krejčí J, McKune A, et al. Hydrogen Rich Water Consumption Positively Affects Muscle Performance, Lactate Response, and Alleviates Delayed Onset of Muscle Soreness After Resistance Training. J Strength Cond Res. 2021,2;
[5]Cheung K, Hume P, Maxwell L. Delayed onset muscle soreness : treatment strategies and performance factors. Sports Med. 2003;33(2):145-64.
[6]Amalraj A, Divya C, Gopi S. The Effects of Bioavailable Curcumin (Cureit) on Delayed Onset Muscle Soreness Induced By Eccentric Continuous Exercise: A Randomized, Placebo-Controlled, Double-Blind Clinical Study. J Med Food. 2020;23 (5):545-553.
[7] Leeder J, Gissane C, van Someren K, et al. Cold water immersion and recovery from strenuous exercise: a meta-analysis. Br J Sports Med. 2012;46 (4):233-40.
[8] Hill J, Howatson G, van Someren K, et al. Compression garments and recovery from exercise-induced muscle damage: a meta-analysis. Br J Sports Med. 2014;48 (18):1340-6.
[9] Heiss R, Lutter C, Freiwald J, et al. Advances in Delayed-Onset Muscle Soreness (DOMS) - Part II: Treatment and Prevention. Sportverletz Sportschaden. 2019;33 (1):21-29.
[10]Nahon RL, Silva Lopes JS, Monteiro de Magalhães Neto A. Physical therapy interventions for the treatment of delayed onset muscle soreness (DOMS): Systematic review and meta-analysis. Phys Ther Sport. 2021;52:1-12.
[11] Yu M, Wang X, Zhou X. Analysis of the Effect of Acupuncture and Pressing of Traditional Chinese Medicine on Recovery of Delayed Muscle Soreness in Athletes. J Healthc Eng. 2022,Feb 7;2022:7875068.
[12]Afonso J, Clemente FM, Nakamura FY, et al. The Effectiveness of Post-exercise Stretching in Short-Term and Delayed Recovery of Strength, Range of Motion and Delayed Onset Muscle Soreness: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Front Physiol. 2021;12:677581.
[13] Torre MF, Martinez-Ferran M, Vallecillo N, et al. Supplementation with Vitamins C and E and Exercise-Induced Delayed-Onset Muscle Soreness: A Systematic

Review. Antioxidants (Basel). 2021 Feb 12;10(2):279.
[14] Lu X, Wang Y, Lu J, et al. Does vibration benefit delayed-onset muscle soreness?: a meta-analysis and systematic review. J Int Med Res. 2019;47 (1):3-18.
[15] Huang C, Wang Z, Xu X, et al. Does Acupuncture Benefit Delayed-Onset Muscle Soreness After Strenuous Exercise? A Systematic Review and Meta-Analysis. Front Physiol. 2020;11:666.
[16] Guo J, Li L, Gong Y, et al. Massage Alleviates Delayed Onset Muscle Soreness after Strenuous Exercise: A Systematic Review and Meta-Analysis. Front Physiol. 2017;8:747.
[17]Hammons D,McCullough M. The Effect of Dry Cupping on Gastrocnemius Muscle Stiffness, Range of Motion and Pain Perception After Delayed Onset Muscle Soreness. Altern Ther Health Med. 2021 Nov 30:AT6903. Epub ahead of print
[18] Qiao L, Guo M, Qian J, et al. Research Advances on Acupuncture Analgesia. Am J Chin Med. 2020;48 (2):245-258.
[19]Li YM, Gao SZ. [Discussion and analysis on point "Siguan"]. Zhongguo Zhen Jiu. 2005;25 (5):340-2.
[20] Sun Y, Li YM, Song YX, Chen SZ. Data mining analysis of main treatment syndromes and compatibility law of Hegu acupoint and Taichong acupoint [J]. Chinese Journal of Traditional Chinese Medicine Emergency,202,31(04):616-620.
[21] Yim YK, Kang WC, Cho JH, et al. Crossover clinical trial to determine the effect of manual acupuncture at Siguan points (bilateral LI4 and LR3) on intestinal motility in healthy subjects. Am J Chin Med. 2007;35 (2):209-18.
[22] Li CH, Wang YZ, Guo XY. [Acupuncture at Siguan points for treatment of primary dysmenorrhea]. Zhongguo Zhen Jiu. 2008;28 (3):187-90.
[23] Lin XM, Yao X, Di Z. [Acupuncture at "Siguan" combined with Gallbladder Meridian acupoints for migraine: a randomized controlled trial]. Zhongguo Zhen Jiu. 2014;34 (10):947-50.
[24] Wang JJ, Meng H, Cui CB, et al. [On the important role of Siguan points in treatment of chronic fatigue syndrome]. Zhongguo Zhen Jiu. 2006;26 (2):116-9.
[25]Shan Y, Wang ZQ, Zhao ZL, et al. An FMRI study of neuronal specificity in acupuncture: the multiacupoint siguan and its sham point. Evid Based Complement Alternat Med. 2014;2014:103491.
[26] Cheng ZL, Zhao MY, Cao XY, Liu JF, Qin PJ, Liu Q, Cheng ZQ. Chinese journal of traditional Chinese medicine,2017,32(01):49-52.
[27] Zhong H, Liu Y, Xiong J, Hu B, Pei X, Chang XR, Liu M, Wang XJ, Shao XN, Tan XW. Acupuncture and moxibustion treatment strategies for delayed onset muscle soreness based on pathophysiology (English)[J/OL].World Journal of Acupuncture-Moxibustion: 1-9 [2022-04-06].
[28] Hawker GA, Mian S, Kendzerska T, French M. Measures of adult pain: Visual Analog Scale for Pain (VAS Pain), Numeric Rating Scale for Pain (NRS Pain), McGill Pain Questionnaire (MPQ), Short-Form McGill Pain Questionnaire (SF-MPQ), Chronic Pain Grade Scale (CPGS), Short Form-36 Bodily Pain Scale(SF-36 BPS), and Measure of Intermittent and Constant Osteoarthritis Pain(ICOAP). Arthritis Care Res. 2011;63(S11):S240–S52.
[29] Bahreini M, Jalili M, Moradi-Lakeh M. A comparison of three self-report pain scales in adults with acute pain. J Emerg Med. 2015;48(1):10–8.
[30]David Hannack Tony.The relationship between thigh circumference and knee extension and flexor strength and its application in the assessment of knee injury rehabilitation[J].Journal of Beijing Sports University,1996(S1):16- 20.
[31] Holub C, Smith JD. Effect of Swedish massage on DOMS after strenuous
• +exercise. Int J Exercise Sci. 2017;10(2):258–65.
[32] Lewis PB, Ruby D, Bush-Joseph CA. Muscle soreness and delayed-onset muscle soreness. Clinics in sports medicine 2012; 31: 255–262
[33] Huang LY, Weng XQ, Lin WT. Effects of intermittent hypoxia on mitochondrial calcium transport and energy metabolism [J]. Chinese Journal of Clinical Rehabilitation,2003(27):3778-3779.
[34]Di MS, Napolitano G, Venditti P. Mediators of Physical Activity Protection against ROS-Linked Skeletal Muscle Damage[J].Int J Mol Sci,2019,20(12).
[35]Ho A, Palla AR, Blake MR, et al. Prostaglandin E2 is essential for efficacious skeletal muscle stem-cell function, augmenting regeneration and strength[J].Proc Natl Acad Sci U S A,2017,114(26):6675-6684.
[36]Erthal V, da Silva MD, Cidral-Filho FJ, et al. ST36 laser acupuncture reduces pain-related behavior in rats: involvement of the opioidergic and serotonergic systems. Lasers Med Sci. 2013;28 (5):1345-51.
[37] Shinbara H, Nagaoka S, Izutani Y, et al. Contribution of adenosine to the increase in skeletal muscle blood flow caused by manual acupuncture in rats. Acupunct Med. 2017;35 (4):284-288.
[38] Zhang X, Chai ZM, Zhao L. Delayed onset muscle soreness and skeletal muscle satellite cells: repair of skeletal muscle injury[J].Chinese Tissue Engineering Research,2015,19(37):6031-6036.
[39] Chargé SB, Rudnicki MA. Cellular and molecular regulation of muscle regeneration[J].Physiol Rev,2004,84(1):209-238.
[40] Sicari BM, Dearth CL, Badylak SF. Tissue engineering and regenerative medicine approaches to enhance the functional response to skeletal muscle injury[J].Anat Rec (Hoboken),2014,297(1):51-64.

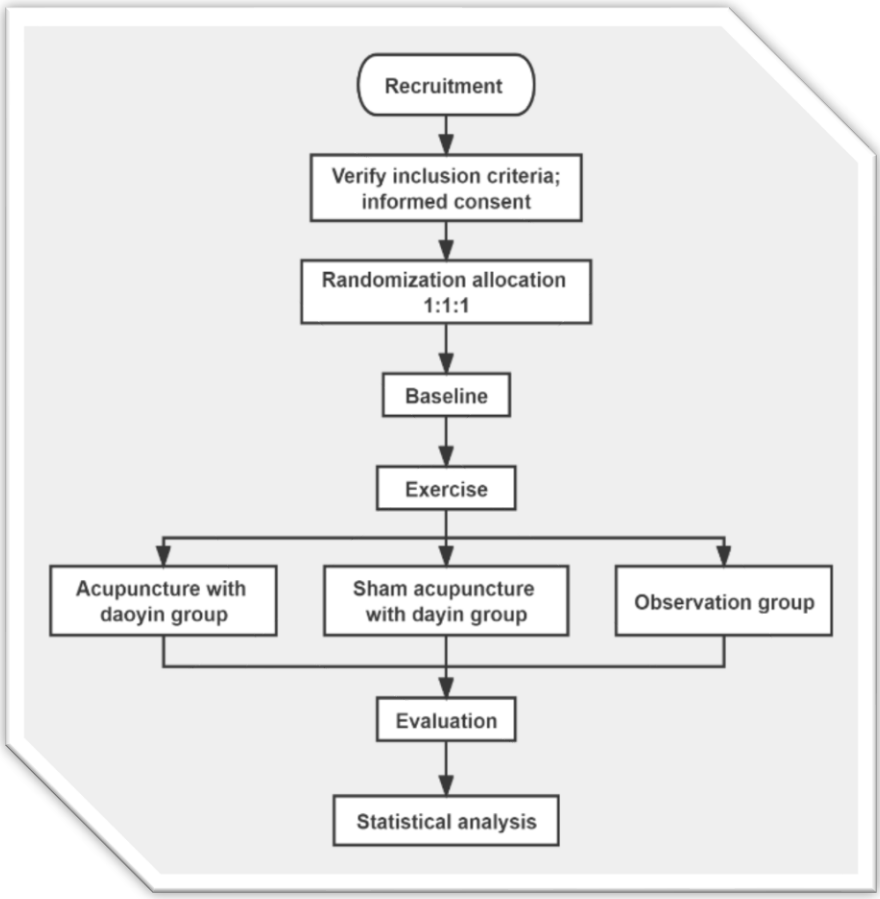
Table 1. Study schedule for recruitment, interventions, outcome measurements.

STUDY PERIOD	Enrollment	Allocation	Exercise	Treatment			Observe
TIMEPOINT (days)	-1	0	1	2	3	4	5~7
ENROLLMENT							
Eligibility screen	×						
Informed consent	×						
Physical examination	×						
Randomization		×					
Allocation		×					
INTERVENTION							
Acupuncture "Si Guan" with Daoyin			×	×	×	×	♦♦ ▬▬
Sham Acupuncture with Daoyin			×	×	×	×	♦♦ ▬▬
Observe			×				♦♦ ▬▬
ASSESSMENTS							
Primary outcome							
VAS	×	×	×	×	×	×	×
Secondary outcomes							
Local tenderness detection	×	×	×	×	×	×	×
Serum collection							
CK	×	×	×	×	×	×	
BLA	×	×	×	×	×	×	
LDH	×	×	×	×	×	×	
NE	×	×	×	×	×	×	
β-EP	×	×	×	×	×	×	
IL-6	×	×	×	×	×	×	
Adverse events			♦ ▬▬				♦

Table 2. Details of acupuncture and sham acupuncture group.

Group	acupoints	Location
Acupuncture	Hegu (LI4)	Between the 1st and 2nd metacarpal bones, at the midpoint of the radial side of the 2nd metacarpal bone
	Taichong (LR3)	In the depression anterior to the junction of 1st and 2nd metatarsal bones
Sham acupuncture	NA1	1 cm from the radial side of the Hegu (LI4) point
	NA2	1 cm from the radial side of the Taichong (LR3) point

Figure 1. Study flowchart.



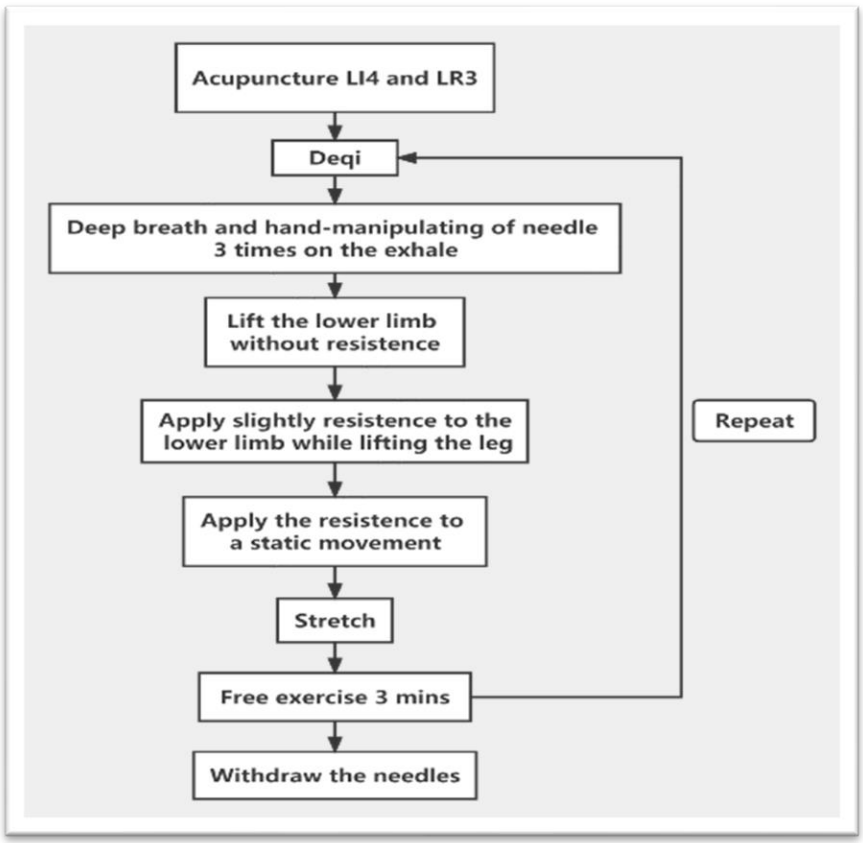


Figure 3. Illustration of the treatment process

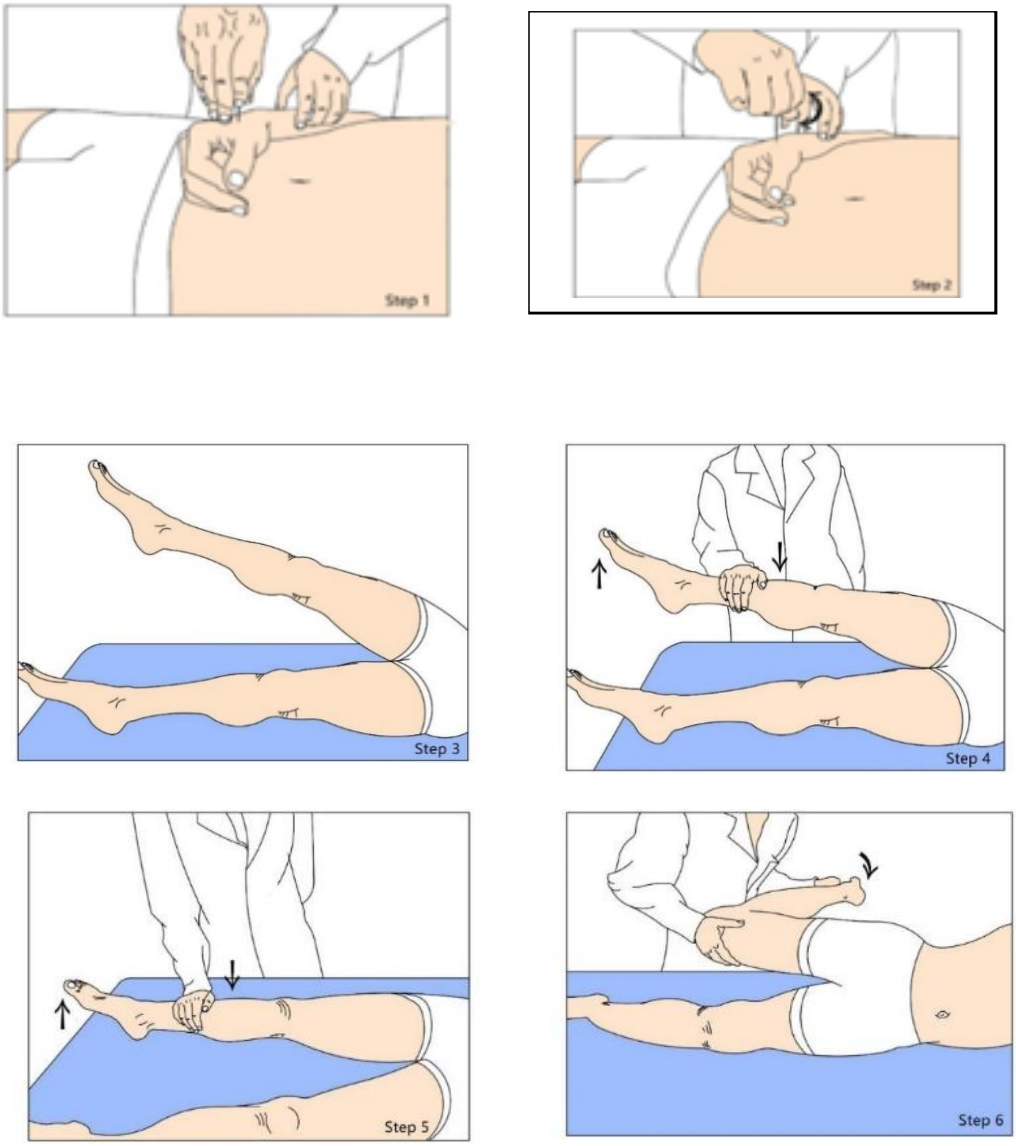
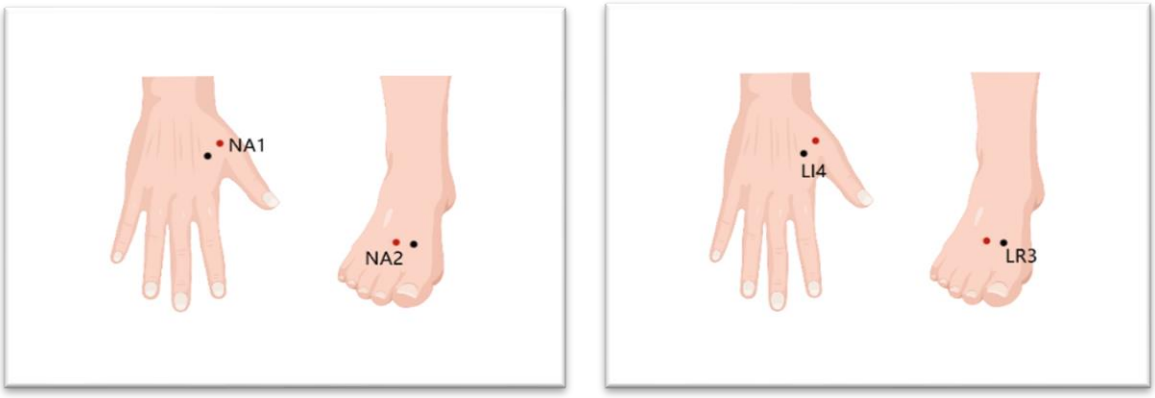


Figure 4. Locations of the acupoints and non acupoint



新 冠 中 医 临 床 治 疗 感 悟

上海市第一人民医院 中医科 白秀庆

新冠病毒流行已经近四年了，目前主流的奥密克戎毒株具有隐匿性强、传染性强、传播迅速的特点，但毒性已经较原始毒株大大减弱了。中医药全程参与了新冠的治疗，不论是在危重症抢救、新冠发热期间，还是新冠后遗症状、长新冠，中医药都取得了瞩目的疗效，彰显了中医药的不可替代性。国家卫健委发布的«新型冠状病毒肺炎诊疗方案»都有详细的中医诊疗标准。以下分享我在门诊中的几例病案。

病案举例

病案 1.白某某，男，54 岁。一诊：2022 年 12 月 26 日，发热恶寒体温 39.6 摄氏度，咽痒痛，咳嗽，白痰，轻度关节酸痛，大便正常，舌质淡红，苔薄白，脉弦。处方：炙麻黄 9 克，桂枝 6 克，杏仁 9 克，生甘草 6 克，白芍 6 克，荆芥 9 克，苍术 9 克，薄荷 5 克，制半夏 6 克，白菊花 3 克，连翘 12 克，桔梗 3 克，7 帖。发热逐日减轻，第三天测新冠核酸阳性抗原阳性，第五天热平，第七天新冠抗原检测转阴，期间能够正常办公。

二诊：2023 年 1 月 3 日，咳嗽、咽痒、白痰，稍微快走气短，舌淡红少许齿印，苔薄白，脉弦。处方：生黄芪 9 克，炒白术 9 克，防风 6 克，炒白芍 6 克，制半夏 6 克，橘皮 6 克，生甘草 6 克，枇杷叶 9 克，炙款冬 3 克，五味子 6 克，干姜 3 克，细辛 2 克，苍术 6 克，薄荷 3 克，10 帖。药后症状基本缓解。

病案 2. 陈某某，女，37 岁，就诊时间：2023 年 8 月 9 日，发热，微恶风 4 天，体温 38.9 摄氏度，咳嗽、白痰，舌淡红，苔薄白，脉弦细。新冠核酸阳性，新冠第二次感染。处方：炙麻黄 9 克，桂枝 8 克，杏仁 6 克，生甘草 6 克，荆芥 9 克，苍术 9 克，淡豆豉 15 克，藿香 9 克，紫苏叶 9 克，制半夏 9 克，细辛 3 克，干姜 6 克，炒麦芽 12 克，4 帖。1 天后热平，一周后症状完全消失。

病例 3. 陆某某，女，36 岁。就诊时间：2023 年 8 月 9 日，发热不恶寒 2 天，体温 38.2 摄氏度，咳嗽，咽痛，痰色白质稀，气短，自汗，乏力，舌淡红，齿印，苔薄白腻，脉弦细。新冠核酸阳性，新冠第二次感染。与病案 2 的陈某某一同旅游时共患新冠。炙麻黄 3 克，荆芥 9 克，苍术 6 克，淡豆豉 15 克，薄荷 5 克，桔梗 6 克，杏仁 6 克，生甘草 6 克，藿香 9 克，紫苏叶 9 克，制半夏 6 克，细辛 3 克，功劳叶 9 克，生黄芪 12 克，白术 15 克，防风 6 克，生牡蛎 30 克，瘪桃干 15 克，麻黄根 15 克，7 帖。两周后电话随访，服药两天后发热消失，三天后乏力等症状基本缓解。患者附带告诉笔者因为 11 岁的儿子同时二阳发热，她自己的中药也给儿子服用了一天，次日未再发热，因此没有继续服用药物。

病例 4. 朱某某，男，78 岁。就诊时间：2023 年 10 月 19 日，气短胸闷 3 个月，乏力，咳嗽，咽部不适，少许白痰，味觉减退，自汗，便秘，头晕。舌暗红，苔薄白，脉弦。处方：炙麻黄 3 克，荆芥 9 克，苍术 6 克，薄荷 4 克，杏仁 9 克，　牛蒡子 9 克，枇杷叶 9 克，五味子 5 克，细辛 2 克，白芍 6 克，制半夏 6 克，生甘草 6 克，生地黄 9 克，玄参 6 克，钩藤 9 克，瘪桃干 15 克，功劳叶 9 克，玉竹 12 克，7 帖。药后诸症改善。

病例 5. 沈某某，女，78 岁。就诊时间：2023 年 10 月 19 日，咳嗽气短 1 个月，白痰，便秘，胃纳差，口中酸，入睡难，舌暗红苔薄黄腻脉弦细。2 个月之前有新冠感染史。处方：炙麻黄 5 克，荆芥 9 克，苍术 6 克，薄荷 5 克，杏仁 12 克，　牛蒡子 12 克，枇杷叶 9 克，五味子 4 克，细辛 3 克，桃仁 9 克，白芍 9 克，生甘草 5 克，薏苡仁 15 克，防风 6 克，玄参 9 克，望江南 9 克，景天三七 15 克，　远志 9 克，淡豆豉 15 克，生山栀 3 克，佛手 12 克，7 帖。一个月后电话随访，患者服药 1 周咳嗽气短基本消失，胃纳恢复正常，口中酸味消失，便秘、睡眠改善。

讨论：

新冠感染具有起病急骤，传播迅速，传染性强的特点，最初几年还引起大流行，症状表现为发热恶寒、头痛、身痛、鼻塞、流涕、咳嗽、咳痰、咽痛，甚至气短气喘等。这些非常符合中医所认为由时行疫毒引起的时行感冒的特征。从去年 3-4 月、12 月、今年 5 月至今发病的表现来看，我国北方患者症状重，南方轻；冬季症状重；不再大流行。中医看病讲究邪正斗争，«内经»“正气存内，邪不可干。”所以要分辨清楚何种正气不足，新冠容易耗伤肺气脾胃，故出现气短、气喘、乏力、腹泻、自汗、盗汗，味觉胃纳减退等。玉屏风散、四君子汤是治疗肺气虚、脾气虚的代表方。当然如果疫气严重，则强壮者也容易得病。邪气的性质判断要结合地域、季节、病邪作用人体后的症候特征等来判断，最近这一年来表现来看，个人认为主要是风寒之邪、痰饮湿，风热少见。«伤寒论»第三十五条：太阳病，头痛发热，身疼腰痛，骨节疼痛，恶风，无汗而喘者，麻黄汤主之。两千年前的古书所述症状和去年底的许许多多新冠患者的表现极其相似。麻黄汤是治疗风寒表实证的良方。新冠加重往往与病毒侵犯下呼吸道肺部炎症加剧有关，即使仅有上呼吸道感染症状，但肺 CT 还是经常发现肺部有斑片状炎症表现。«伤寒论»第四十条：伤寒表不解，心下有水气，干呕，发热而咳，或渴，或利，或噎，或小便不利，少腹满，或喘者，小青龙汤主之。发热咳喘肺部斑片状炎症，符合太阳伤寒表证未解，水饮上犯肺胃的病机，小青龙汤用之良效。新冠后遗症状、长新冠，个人认为与正气不足，不能完全透达邪气有关，要用扶助正气、透达邪气的方药。扶正可以用玉屏风散、四君子汤、沙参麦门冬汤等，透邪化湿可以用荆芥、苍术、豆豉、薄荷等。前面 5 例病案就是上述对这一年的新冠的特点病机的认识采取的具体实践应用。

目前中国国家卫健委对新冠的防控属于乙类乙管，防控标准因场所、因人而异。新冠二阳、三阳者不在少数，防治中充分运用好中医中药还是大有裨益的。

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Review on Evidence Based Acupoints in Promoting Yin-Yang Redox Equilibrium

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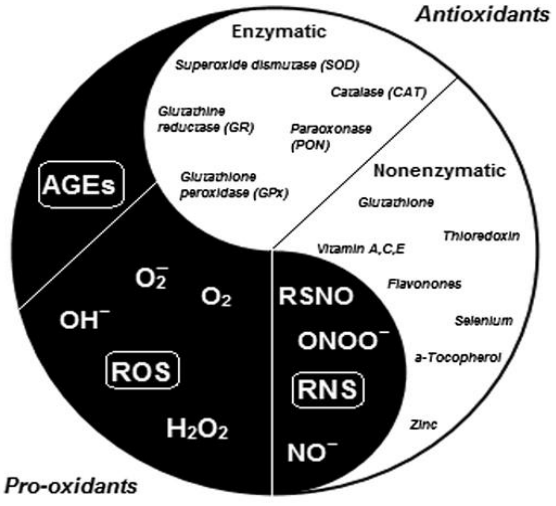
Background

In modern Western medicine, the concept of redox equilibrium between antioxidants and oxidants is an important concept for maintaining a healthy condition (Zuo J et al, 2022). This concept of balance is similar to the concept of Yin-Yang, which has existed in Traditional Chinese Medicine (TCM) for more than 2,000 years. It is amazing that both concepts of equilibrium have many similarities enabling them to be compared and discussed as the same system. Below is a systematic review on the subject.

1. Redox Reactions in Classical Acupuncture Review (Traditional Chinese Medicine)

In TCM (traditional Chinese medicine), the concept of Yin-Yang balance was first described in the Yellow Emperor's Classic of Internal Medicine's first chapter called Su Wen (translated as ordinary questions), written about 2,500 years ago. In Su Wen, it was stated that



"Yin-yang imbalance is the cause of all diseases and a good doctor will observe the patient's skin, feel the pulse and thus, take the first step in determining whether it is Yin or Yang disease." (Ou B et al, 2003; Olsen, 2013).

In TCM, the antioxidant process that prevents excessive oxidation (stress) can be called Yin and the naturally occurring energy-generating oxidation process is called Yang. From this point of view, there may be a strong correlation even similarity between the yin-yang balance of TCM and the modern theory of oxidant-antioxidant balance that could support the role of acupuncture as a therapy (Ou B et al, 2003; Kandarakis et al, 2017). See Figure 1.

Figure 1. The concept of redox equilibrium (oxidant-antioxidant) is described by the concept of yin-yang balance (Ou B et al, 2003; Kandarakis et al, 2017).

2. Redox Reactions in Medical Acupuncture Review (Modern Western Medicine)

In its medical development, acupuncture provides significant evidence as a therapy in stimulating endogenous antioxidants and inhibiting the occurrence of oxidants in the body (Zeng X et al, 2014).

Acupuncture is a therapy by inserting needles or another medical device at specific acupoints to treat several diseases. Acupoints are located on the surface of the skin and have low electrical resistance, high electrical potential, and more peripheral nerves than other skin surfaces. The success of acupuncture therapy is demonstrated by different manipulation techniques, which restore balance to the body, thereby producing antioxidant effects (Lin LT et al, 2015). Stimulation of the point manually by inserting a fine needle makes changes in the DC electrical current in the body thereby stimulating the activation of surrounding cells which are more positively charged. The change in the ion around the more negative needle, also makes it possible to transfer electrons to free radicals whose electrons are unpaired (Saputra K, 2012).

Many studies have proven acupuncture has a neuroprotective function in cerebral ischemia injury in patients with ischemic stroke, vascular dementia and Alzheimer's disease through multiple anti-oxidative, anti-apoptotic effects (Du SQ et al, 2018; Jittiwat J, 2019; Su XT et al, 2020; Wang XR et al, 2015; Zeng et al, 2014; Zhang ZY et al, 2018). Acupuncture can lower blood pressure by increasing antioxidant enzymes, such as glutamate dehydrogenase 1, aldehyde dehydrogenase 2, glutathione S-transferase M5, and SOD in the spinal

cord. The antihypertensive effect of electro-acupuncture (EA) is related to the attenuation of the expression of apelin in the rostral ventrolateral medulla (RVLM), with its anti-inflammatory effect downregulating the oxidative stress induced by apelin. Animal models of renal failure-induced hypertension suggest that the antihypertensive mechanism by EA is related to the effects of oxidative stress on insulin-like growth factor-1 (IGF-1), inducible NOS (iNOS), heme oxygenase, and the expression of thiobarbituric acid reactive substances. It is concluded that acupuncture can modulate renal sympathetic nerve activity as a mediating effect of antioxidant and anti-inflammatory enzymes. The effects of acupuncture are segmental and central to the central nervous system which play an important role in the neural mechanism of hypertension (Zeng XH et al, 2014). In addition, acupuncture can also inhibit oxidative stress related regulating NO, NOS, Nox activity in aortic tissue, and reduce serum angiotensin II levels (Leung SB et al, 2016; Shi GX et al, 2016). Attia et al (2016) reported laser acupuncture has antioxidant and anti-inflammatory therapeutic effects in rheumatoid arthritis patients. It could increase SOD, GR, GSH, and plasma ATP concentrations, as well as a decrease in plasma MDA, serum nitrate and nitrite, serum CRP (C-reactive protein), plasma IL-6 and GPx activity. The role of acupuncture in the redox equilibrium of the body's biochemical system has been proven by studies that provide significant results in reducing free radicals and increasing antioxidant enzymes (Zeng XH et al, 2014; Lin LT et al, 2015).

Acupuncture has the effect to correct redox imbalance in diabetic patients. As hyperglycemia cause auto-oxidation in the kidney resulting in ROS formation. Increase in ROS stimulates NF-κB which stimulates the formation of cyclooxygenase-2 (COX-2), iNOS, and IL-1β as inflammatory genes, resulting in inflammation that can damage the kidneys. While acupuncture at LR3 Taichong and SP6 Sanyinjiao can reduce blood glucose level leading to reduction of glucose in the kidney and the ROS formation (Lee CI et al, 2015).

3. Acupoints Selection for Redox Equilibrium

To conclude all available study reports on the effects of acupuncture in correcting Yin-Yang redox imbalances, the acupoints mostly selected based on Evidence-Based Medicine (EBM) for redox equilibrium, in activating the antioxidant system and inhibiting oxidant production are as follows.

3.1 ST36 Zusanli

Location :

on the anterior of the lateral leg, on the line connecting ST35 Dubi with ST41 Jiexi, 3 B-cun inferior to ST35 Dubi (WHO, 2008).

Vascularization :

anterior tibial artery and vein.

Innervation :

the superficial area by the lateral sural cutaneous nerve and the saphenous branch of the cutaneous nerve, the deep area by the deep peroneal nerve (Cheng XN, 2009).

EBM reasons:

- can increase the expression of Trx, GCLM, phospho-Akt, eNOS, GSH levels, SOD, CAT, HO-1, NQO1, and Nrf2 activation, can lower levels of MDA, TNFα, IL-1β, IL-6, nitrite, nitrate, nitrotyrosine, CRP, ESR, TXNIP, NLRP3, caspase-1, AST, ALT.
- can inhibit the production of O2-, immunoreactive hepatocytes NT and 4HNE, and NADPH oxidase activity (Attia AMM et al, 2016; Du SQ et al, 2018; Lee YJ 2016; Leung SB et al, 2016; Lv E et al, 2015; Shi GX et al, 2016; Wang XR et al, 2015; Siu FKW et al, 2005).

3.2 LR3 Taichong

Location :

on the dorsum of the foot, between the I and II metatarsal bones, in the groove distal to the junction of the bases of the two bones, above the dorsal pedis artery (WHO, 2008).

Vascularization :

dorsal venous network of the foot, dorsal metatarsal I artery.

Innervation :

branch of the deep peroneal nerve (Cheng XN, 2009).

EBM reasons :

- can increase the expression of NQO1, HO-1, GPx, eNOS, SOD, CAT, and Nrf2 activity.
- can reduce Fe3+ levels and heavy metal binding ferritin, nitrite, nitrate, nitrotyrosine, CRP, ESR, BUN, NF-κB activity, COX-2, iNOS, Nox, Bax expression, and the cytochrome c.
- can inhibit the production of ONOO-.
- can inhibit PI3K/Akt. (Attia AMM et al, 2016; Lee CI et al, 2015; Leung SB et al, 2016; Lv E et al, 2015; Shin HY et al, 2015; Wang XR et al, 2015; Zeng XH et al, 2014).

3.3 SP6 Sanyinjiao

Location :

on the tibial side of the foot, posterior to the medial border of the tibia, 3 B-cun superior to the medial malleolus bulge (WHO, 2008).

Vascularization :

the great saphenous vein, posterior tibial artery, and vein.

Innervation :
the superficial area by the medial crural cutaneous nerve, and the deep area by the posterior tibial nerve (Cheng XN, 2009).
EBM reasons :

- can increase the expression of GCLM, GPx, SOD, and CAT.
- can reduce levels of MDA, BUN, TNFα, IL-1β, IL-6, IL-4, nitrite, nitrate, CRP, ESR, NO excessive, IFNγ, iNOS activity, COX-2, NF-κB.
- can inhibit the production of ONOO-. (Attia AMM et al, 2016; Lee CI et al, 2015; Lv E et al, 2015; Song JK et al, 2010).

3.4 HT7 Shenmen
Location :
on the anteromedial side of the wrist, radially from the flexor carpi ulnaris tendon, in the palmar wrist crease (WHO, 2008).
Vascularization :
ulnar artery.
Innervation :
medial antebrachial cutaneous nerve, on the ulnar side, innervated by the ulnar nerve (Cheng XN, 2009).

EBM reasons :

- can increase the level of GSH, SOD, CAT, and glutathione peroxidase.
- can lower MDA, AST, and ALT levels.
- can inhibit the immunoreactivity of NT and 4HNE hepatocytes (Lee YJ, 2016).

3.5 GV20 Baihui
Location :
on the head, 5 B-cun superior to the anterior hairline, on the median anterior (WHO, 2008).
Vascularization :
an anastomotic network formed by the superficial temporal artery and vein, and the occipital artery and vein on both sides.

Innervation :
Branch of the great occipital nerve (Cheng XN, 2009).
EBM reasons:

- can increase the expression of NQO1, HO-1, GSH-Px, SOD, and Nrf2 activity.
- can decrease levels of TXNIP, NLRP3, CASP-1, and IL-6.
- can inhibit the production of O2-.
- can regulate NO and NOS (Du SQ et al, 2018; Jittiwatt J, 2019; Lin LT et al, 2015; Shi GX et al, 2016; Wang XR et al, 2015).

4. Conclusions

Acupuncture with various modalities can promote beneficial redox equilibrium to maintain body homeostasis by stimulating antioxidant enzymes, preventing the formation of ROS/RNS, inhibiting enzymes that stimulate oxidant formation, stimulating gene expression for growth and immunity, and inhibiting gene expression for inflammation.
Acupuncture can activate all components of the body's antioxidant system and inhibit inflammation. In addition, it is safe and free from pharmacological side effects.

References

1. Attia, AMM., Ibrahim FAA., El-Latif NAA., Aziz SW., Elwan AM., Aziz AA., Elgendy A., et al. Therapeutic antioxidant and anti-inflammatory effects of laser acupuncture on patients with rheumatoid arthritis. Lasers in Surgery and Medicine. 2016;48:490-497. DOI: 10.1002/lsm.22487.
2. Cheng, X. N. Meridian, and acupoints. Beijing: People's Military Medical Press. 2009.
3. Du SQ., Wang XR., Zhu W., Ye Y., Yang JW., Ma SM., Ji CS., Liu CZ. Acupuncture inhibits TXNIP-associated oxidative stress and inflammation to attenuate cognitive impairment in vascular dementia rats. CNS Neuroscience & Therapeutics. 2018;24:39-46. DOI: 10.111/cns.12773.
4. Jittiwat, J. Baihui point laser acupuncture ameliorates cognitive impairment, motor deficit, and neuronal loss partly via antioxidant and anti-inflammatory effects in an animal model of focal ischemic stroke. Hindawi Evidence-Based Complementary and Alternative Medicine. 2019;1204709:1-9. DOI: 10.1155/2019/1204709.
5. Kandarakis, ED., Papalou O., Kandaraki EA., Kassi G. Nutrition as a mediator of oxidative stress in metabolic and reproductive disorders in women. European Journal of Endocrinology. 2017;176:R79-R99. DOI: 10. 1530/EJE-16-0616.
6. Leung SB., Zhang H., Lau CW., Lin ZX. Attenuation of blood pressure in spontaneously hypertensive rats by acupuncture was associated with reduced oxidative stress and improvement from endothelial dysfunction. Chinese Medicine. 2016;11:38:1-18. DOI: 10.1186/s13020-016-0110-0.
7. Lee CI., Lee HJ., Lee YK., Lim SC. The effects of LR3 and SP6 acupuncture on renal damage in Streptozotocin-induced diabetic mice. The Acupuncture. 2015;32:3:41-51. DOI: 10.13045/acupunct.2015037.
8. Lee, Y. J. Acupuncture inhibits liver injury induced by morphine plus acetaminophen through an antioxidant system.

European Journal of Integrative Medicine. 2016;8:3:204-212. DOI: 10.1016/j.eujim.2015.12.009.
9. Lin, LT., Li H., Yang JW., Zeng XH., He T., Shi GX., Liu CZ. Acupuncture mechanism on oxidative stress in various diseases. Science Foundation in China. 2015;23:2:60-65.
10. Olsen, L. F., Issinger, O. G., & Guerra, B. (2013). The Yin and Yang of redox regulation. *Redox report : communications in free radical research*, *18*(6), 245–252. https://doi.org/10.1179/1351000213Y.0000000059
11. Ou, B., Huang, D., Hampsch-Woodill, M., & Flanagan, J. A. (2003). When east meets west: the relationship between yin-yang and antioxidation-oxidation. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, *17*(2), 127–129. https://doi.org/10.1096/fj.02-0527hyp
12. Saputra, K. Buku Ajar Biofisika Akupunktur Dalam Konsep Kedokteran Energi. Jakarta: Salemba Medika. 2012.
13. Shi GX., Wang XR., Yan CQ, He T., Yang JW., Zeng XH., Xu Q., et al. Acupuncture elicits neuroprotective effects by inhibiting NADPH oxidase-mediated reactive oxygen species production in cerebral ischemia. Scientific Reports. 2016;5:17981:1-10.
14. Shin HY., Lee HJ., Kim JS. The protective effects of acupuncture on oxidative stress caused by cadmium in the kidney. The Acupuncture. 2015;32:1:1-11. DOI: 10.13045/acupunct.2015001.
15. Siu FKW., Lo SCL., Leung MCP. Electro-acupuncture potentiates the disulfide-reducing activities of the thioredoxin system by increasing thioredoxin expression in ischemia-reperfused rat brains. Life Sciences 2005; 77:4:386-399. DOI: 10.1016/j.lfs.2004.10.069.
16. Song JK., Lee BR., Yang GY., Jeon JH. Anti-oxidative and immune-regulative effects of electro-acupuncture at SP6 in aged rats. The Korean Jornal of Meridian & Acupoint. 2010;27:1:87-106.
17. Su, X. T., Wang, L., Ma, S. M., Cao, Y., Yang, N. N., Lin, L. L., Fisher, M., Yang, J. W., & Liu, C. Z. (2020). Mechanisms of Acupuncture in the Regulation of Oxidative Stress in Treating Ischemic Stroke. *Oxidative medicine and cellular longevity*, *2020*, 7875396. https://doi.org/10.1155/2020/7875396
18. Wang, XR., Shi GX., Yang JW. Acupuncture ameliorates cognitive impairment and hippocampus neuronal loss in experimental vascular dementia through Nrf-2 mediated antioxidant response. Free Radical Biology and Medicine. 2015;89:1077-1084. DOI: 10.1016/j.freeradbiomed. 2015.10.426.
19. World Health Organization. Regional Office for the Western Pacific. (2008). WHO standard acupuncture point locations in the Western Pacific region. WHO Regional Office for the Western Pacific. https://apps.who.int/iris/handle/10665/353407
20. Zeng XH et al (2014). Acupuncture mechanism and redox equilibrium. Hindawi Evidence-Based Complementary and Alternative Medicine. 2014;483294:1-4. DOI:10.1155/2014/483294.
21. Zuo, J., Zhang, Z., Luo, M., Zhou, L., Nice, E. C., Zhang, W., Wang, C., & Huang, C. (2022). Redox signaling at the crossroads of human health and disease. *MedComm*, *3*(2), e127. https://doi.org/10.1002/mco2.127

《英国中医针灸杂志》征稿启事

《英国中医针灸杂志》为英国中医药学会主办的中英文双语学术期刊，每年 4 月和 10 月发行两期，并可在学会网上阅览。本会刊宗旨着重在于为大家提供一个平台和论坛，借此互相沟通学习，不断提高学术水平和质量，从而推动中医针灸的发扬光大。欢迎诸位会员，中医同仁及各界读者慷慨赐稿，与大家共同分享你们的临床经验，典型病例分析，行医心得，理论探讨，中医教育和发展，文献综述和研究报告。并建议大家推荐本刊给病人及其周围之人阅读，让更多英国民众看到并亲身体验到中医之奇妙果效，从而提高中医之声誉，扩大中医之影响。

来稿中文或英文均可，中英双语更受欢迎。字数中文 5000 字以内，英文 4000 字以内，并附 200 字以内摘要。文章必须符合以下格式：标题，作者，摘要，关键词，概要，文章内容，综述/讨论或结论，以及参考文献。每篇文章也可附带一份单独的作者简介。

所有来稿必须是尚未在其它杂志上发表过的文章，也不得同时投稿于其它杂志。若编辑审稿后认为需做明显改动，将会与作者联系并征得同意。本会刊保留版权，未发表的文章将不退稿。投稿一律以电子邮件发往 info@atcm.co.uk.请注明"杂志投稿"字样。

下期来稿截至日期为 2024 年 3 月 20 日.

《浅谈动筋针》

作者 聂卉 (英国)， 指导 陈德成 (美国)

摘要：动筋针是源于它独特的针法及理论而得名。动筋针的针刺点多在筋膜层，属中医 ‘经筋’范畴；动筋针疗法在操作时，针法以滞针提拉为主，留针主张带针运动即动气留针，以达到更好的疗效。基于上述针法的主要特点，故此针法被命名为动筋针疗法。完整的动筋针技术主要包括动筋点、动筋针、动筋法、动筋态、动筋理五个部分

动筋针是目前针灸界新针法中一种实用，疗效好，安全的针法。它的设计理念主要是一种以现代解剖为基础的针法，但是也融合了许多传统中医的针灸刺法理论，如内经飞经走气，阿是穴针法等，也可以认为动筋针疗法是一种中西医结合的针灸疗法。

动筋针疗法的适用病种主要是痛症，尤其是急性软组织痛症疗效更佳；其次软组织的疑难杂症如弹响指、踝关节扭伤等也有极佳疗效。

Abstract: Motion acupuncture is named after its unique acupuncture method and theory. The points of Motion acupuncture are mostly in the fascial layer, which is called as Sinew in Chinese medicine. During the operation of Motion acupuncture, it is required to exercise the relating muscles with the needle to achieve a better healing effect. Based on the above main characteristics of the method, this acupuncture method is named motion Acupuncture. The context of motion acupuncture includes motion target point selection; motion needle; motion acupuncture techniques; motion acupuncture mechanism.

The applicable diseases of motion Acupuncture are mainly pain, especially acute soft tissue pain, with better curative effect. Secondly, it also has excellent therapeutic effect on difficult and complicated soft tissue diseases such as trigger finger and ankle joint sprains.

一 介绍动筋针发明人

动筋针发明人是陈德成博士，目前为纽约执照针灸师，美国纽约自然针灸健康中心院长，纽约健康学院教授，世界针灸联合会美国纽约中医针灸传承基地主任。

陈德成获得长春中医药大学学士、硕士，南京中医药大学博士学位，在此期间得到两位名师真传，一位是硕士导师，长春中医药大学刘冠军教授，另一位是博士导师，南京中医药大学邱茂良教授，博士毕业后进入中国中医科学院针灸研究所，任副主任医师，具有 30 余年中医针灸临床经验，先后出版《中国针灸独穴疗法》、《中国针灸对穴疗法》、《中国针灸美容抗衰全书》和《动筋针疗法》等 17 部中医针灸专著，还发表了 100 多篇卓有见蒂的中医针灸美容论文。

中国学者原成都中医药大学校长梁繁荣教授言：‘在继承和创新的实践中，陈德成博士本着尊古而不泥古，创新而不离宗的思想，其动筋针疗法对针灸学的发展做出了一定贡献’。’

二 介绍动筋针疗法

1 什么是动筋针疗法

动筋针疗法是针灸治疗的一种新方法，属于针灸治疗学范畴。是以现代医学如筋膜学和激痛点为理论基础，又基于《灵枢》针法理论为指导思想，是一种中西融合的针灸治疗方法，是目前针灸治痛疗法中快速有效，也是非常安全的一种新疗法【1】。

动筋针疗法的主要内涵有三要素：有特殊的针刺治疗点叫“动筋点”，有特殊的专利针具“动筋针”（貌似毫针），但针体具有棱和螺旋结构，有带针运动叫“动筋态”。三者是动筋针疗法疗效成败的关键【2】。

2 动筋针疗法的产生

是源于陈德成博士长期应用《中国针灸独穴疗法》的实践与思考。针灸独穴疗法主张每次选取一个穴位进行治疗，且强调要施行强烈的针刺手法[3]。而一些患者不能忍受强烈的刺激手法，陈博士就让患者自己带针运动即动态留针，结果发现临床疗效很好，而且患者也不痛。于 2012 年陈德成博士建立了动筋针法体系，叫运动针灸，目前改名叫动筋针疗法[4]。

3 动筋针法的理论来源

以经络和经筋理论为依据，以解剖学和运动学为基础，以痛点、阿是穴、压痛点、激痛点、和结筋点等作为治疗的动筋点[5]。

‘经筋’一词最早见于《灵枢*经筋》中，经筋的‘筋’字是一个惯用的会意字，从分析它的部首可以推断出它的解剖学、组织学的含义。中国古代所用的名词与现代解剖学所用的术语不同，但本质是相同的。与此类似的还有“横路”、“筋结”等，都是指病灶点，即压痛点或激痛点等[6]。

动筋针疗法理论体系的建立，主要受到以下三大理论的影响与启发：有薛立功教授《中国经筋学》所主张的以结筋病灶点（也称结筋点）为治疗核心的针刺方法[7]；有宣蛰人教授的《软组织外科学》所倡导的以压痛点为中心的软组织损伤治疗方法[8]；有美国医生 Janet Travell 的《肌筋膜疼痛与功能障碍—激痛点手册》建立的以激痛点为诊断和治疗中心的疼痛治疗方法[9]。这三大理论构成了动筋针疗法的理论基础。

4 动筋针疗法的具体操作流程

首先是针刺治疗点。我们也叫动筋点，这是治疗的关键点，动筋点的精准确定关系到治疗效果，正确的动筋点也显示了医生的医学理论成熟和经验。进针后就是针法操作，即动筋法，采用滞针提拉（包括有限提拉和无限提拉）特殊手法；然后运用动筋态，即带针运动，这是疗效的催化剂，使疗效倍增[10]。

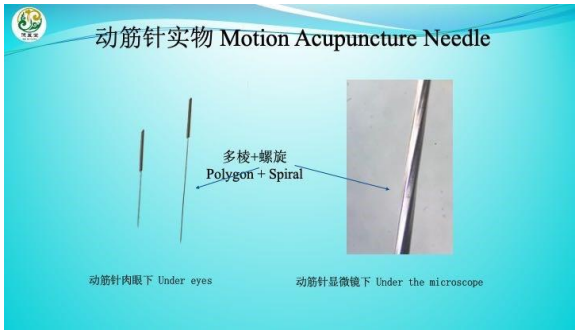
4.1 动筋点的选取方法：

基于以上论述，作为动筋针疗法的治疗点，动筋点并非固定不变，而是动态的，确定动筋点的方法，可以总结为“三步一流程”，即动筋点检查的三个步骤：第一步是病人主诉，也就是医生的问诊，请患者用一个手指指出疼痛的点或部位，一般选择最痛的点；第二步是动态检测，也就是医生的望诊，医生让病人做相关的动作，动态观察动作幅度，确定责任肌；第三步是医生触诊，医生在相关责任肌触诊，找到肌肉病变的反应点，手摸心会确定动筋点，也就是揣穴。这三个步骤是一个完整的确定动筋点的流程，故称“三步一流程”。虽然动筋点是动态的，但是通过三个步骤，可以很快的确定动筋针的治疗点[11]。

准确动筋点的选择需要医生参加系统的培训课程，或者医生有很好的现代医学解剖知识，及医生的职业悟性。动筋点的选择需要医生掌握 80 块以上的肌肉名称、位置及生理功能和病理状态。

4.2 动筋针的特点

动筋针是一种可以使用不同针法、操作方便的用于松解治疗的一种实用新型针具，为无菌和一次性使用。包括针柄、针身和针尖三部分。其针柄和针尖是和毫针相同，而针身的截面形状为多边形和多棱形，但对皮肤肌肉等无伤害。多棱形的针身可以增加操作时的滞感，以便实施手法如滞针提拉等[12]。动筋针针具弥补了毫针刺激量不足的情况，大大提高了软组织疼痛类疾病治疗的效果。



5 动筋法，即动筋针的独特针法

动筋法就是利用动筋针操作的一些手法，基本手法有 6 种包括浮刺法、直刺法、斜刺法、单刺法、双刺法和多刺法。辅助针法有 14 个，这 14 个针法与传统中医针灸刺法紧密相关。包括循压法、推拉法、揉按法、提捏法、搓摩法、弹拨法、摆尾法、捻搓法、刮磨法、滞针法、提捏摆尾法、捻搓摆尾法、揉按推拉法、刮摩推拉法。另外动筋针的特色针法是滞针提拉，其包括有限提拉和无限推拉，这两种针法是动筋针显效的关键点[13]。

6 动筋态，动筋针的留针状态

是指动筋针刺入后，所做的带针运动，动态留针，催气运行，气至病所。也是动筋针疗法的一大特色，对于快速起效，针到痛减，起到至关重要的作用。运动系统中描述的肌肉属于骨骼肌，通常附着于骨，可以随人的意志而收缩和伸展。带针运动的关键是相关责任肌的各种运动，大体包括五种运动如主动运动、被动运动、负荷运动、屈伸运动、动态牵拉。这些运动在治疗各个疾病和责任肌中，有大约 55 种具体的运动方式[1]。

三 动筋针作用机制探讨

1 动筋点的选择是治疗效果的最关键点，它关系到结筋病灶点和激痛点理论，及中医阿是穴。薛立功教授认为，肌肉和肌腱长期承受过重外力，容易导致局部组织劳损，其应力集中点之处，是肌腱、韧带与骨的结合部，也就是经筋的‘结’ ‘聚’点。所谓‘宗筋主束骨而利机关也’，正是动筋针治疗之法。

宣蛰人教授认为软组织损伤导致的疼痛，其治疗的部位主要在于肌肉和骨骼的附着处。

美国医生 Janet Travell 认为，激痛点是指骨骼肌肉可触及的紧绷肌带中所含的局部高度敏感的压痛点，大约有 255 个，这些我们都可以用中医的阿是穴来代替，我们称作动筋点。所以，动筋点的选择是基于中医筋结理论，西医筋膜和软组织学及激痛点学说。

以上是选择动筋点的理论依据和疗效机理。

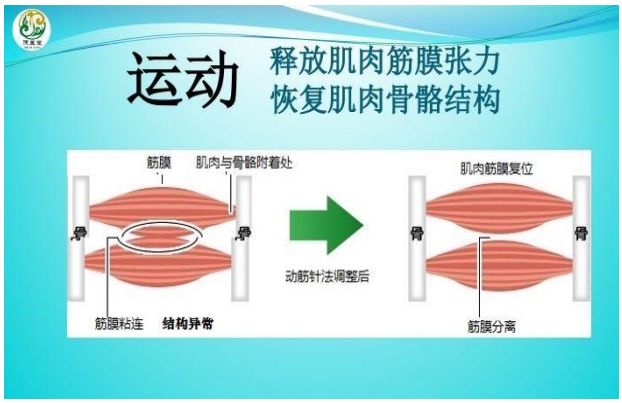
2 动筋针手法关系到中医传统针法和筋膜理论。软组织损伤所导致的疼痛和功能受限，主要是因为肌筋膜链的改变，造成肌肉和骨骼结构的缺失和失衡，滞针提拉是增加刺激量来松解相关的筋膜链，再由筋膜链的传导作用恢复人体结构的平衡[14]。

动筋针法直接刺激浅筋膜，而浅筋膜通过疏松结蹄组织与深筋膜链接，深筋膜包括肌外膜、肌内膜、肌束膜、肌间隔等形成一个筋膜网络，通过筋膜网络传递到骨膜，乃至全身内脏的筋膜，整个筋膜系统是贯穿人体的的一个结蹄组织网[15]。

动筋针的滞针提拉法和 24 个辅助手法都起到了一个强大的刺激量作用于筋膜系统，松解结节和黏连筋膜组织，从而起到减轻疼痛的作用。

3 带针运动的意义，主要指运动相关的责任肌，有近 50 种运动方式作用于不同的肌肉，是运动针法的核心，可以促进血液循环和新陈代谢，以修复损伤的

肌肉[16]；可以使肌肉和骨骼的紊乱结构得以复原和调整，以恢复肌肉功能，从而解除疼痛；也可以使局部紧绷的肌肉松解，消除肌筋膜结节，疏通血液循环，使缺血缺氧的肌肉得到营养。



四 病例介绍

病例 1 ，2023 年 7 月 25 日初诊，中年男性，教师
主诉：慢性腰痛急性发作 2 周
现病史：有多年的腰间盘突出史，平时腰部不舒，偶有左侧腰痛发作 ，核磁共振显示：有广泛的中央后椎间盘突出，导致轻微的鞘囊受损，压迫腰 5 两侧神经根，并有退行性改变。近两周左侧腰痛难忍，痛如刀割，右侧腰轻微痛。腰痛导致不能正常工作及睡眠，不能平卧，喜欢俯卧，平日坐立不安。左侧臀部和大腿不痛，口服止痛药效果不明显。
查体：腰部前屈和后伸都受限，曲度 0 度，腹部深浅位置都无压痛，医者触诊明显压痛在患者左侧腰 4 和腰 5 之间及附近，右侧腰 4 和腰 5 有轻微压痛感，其臀部和腿部无压痛。
诊断：左侧腰间盘脱出急性发作
治法：让病人右侧卧位，用 4 根动筋针，尺寸为直径 0.30 毫米，长度 50 毫米的动筋针，横刺腰竖脊肌，在左侧腰 4/5 上下，每一个针做滞针提拉（有限提拉和无限提拉）2 次，然后每根针做辅助手法揉按法和搓摩法。让病人侧卧左腿做侧展外抬运动和左大腿前屈后伸运动，各 10 次，之后留针 30 分钟，用神灯照射腰部 20 分钟，临起针前，上述两个带针运动分别再做 10 次，起针后病人腰痛大大缓解，疼痛程度从 10/10 到 5/10.
3 天后复诊，自我感觉腰痛无，但用力深压腰 4 和腰 5 之间有一点痛感，自我感觉臀大肌不舒，用两根动筋针松解臀大肌。
一共治疗 4 次，腰痛和臀痛消失。
病例分析：该病人诊断明确是腰间盘脱出，急性发作期，神经根受压水肿，为炎性病变期。按动筋针理论和陈德成博士的课程指导，不管任何诊断，就找动筋点，所以，我认为此病人的动筋点就是腰部竖脊肌，动筋针没刺入腰 4 和腰 5 之间，而是刺入上下腰竖脊肌部位，松解腰部浅筋膜，靠滞针提拉和带针运动而松解了深筋膜和肌肉，使肌肉和肌腱拉长变软，从而减轻了腰鞘囊受压，所以快速减轻疼痛。之后的臀大肌痛是继发性的卫星状激痛点，原发点还是在左腰 4 和和腰 5 之间。

病例 2，2023 年 9 月 18 日初诊，中年女性，商店售货员
主诉：左侧颈痛 1 天
现病史：就诊前一天下午工作中，左颈部开始疼痛，不能转向，无肩臂麻木感。之后家属按摩无效，之后口服止痛药也无效，次日不能上班，因不能转颈，请病假休息，然后到我诊所寻求针灸治疗。
查体：左颈部从左乳突及后部至左颈肩部自觉疼痛难忍，头难以左转，触诊最主要压痛点在腧穴肩井处即斜方肌和肩胛提肌。头颈前屈困难 0 度（正常 45 度），头颈后伸 20 度（正常 45 度），头颈左转引左颈痛加重，头颈右转左颈不痛，颈左侧屈左颈痛，颈右侧屈左颈不痛。
诊断：左颈肌急性拉伤，定位左上斜方肌
治疗：病人右侧卧位，用三支动筋针，尺寸为直径 0.30 毫米，长度 40 毫米，分别斜刺入头颈夹肌上部，斜方肌肩峰端，肩胛提肌肩胛角的浅筋膜层，实施滞针提拉和极限提拉，辅助手法用循压法和搓摩法，带针运动用低头仰头，左右旋转，留针 25 分钟，用神灯照射左颈部 20 分钟，临起针前，上述两个带针运动分别再做 10 次，起针后病人颈痛大大缓解，疼痛程度从 10/10 到 2/10。
病人由于工作忙，初诊 5 天后的第二次预约取消了，也同时告知颈部基本好了。
病例分析：病人由于不适动作引起左侧肌肉拉伤，疼痛的本质是肌肉中肌节的紧张和痉挛，而动筋针的针具，滞针提拉和带针运动就很好的松解了紧绷的肌肉，是通过浅筋膜链到肌肉的治疗作用。

病例 3，2023 年 4 月 9 日，中年女性，厨师
主诉：右手无名指指间关节弹响指多年
现病史：大约 7 年前右手无名指指间关节出现了疼痛，活动后加重，几年后出现了弹响指，即活动手指之后出现响声伴疼痛，也没有系统治疗，近两年，右手无名指指间关节桡侧出现了黄豆粒大小的结节，开始比较软，现在较硬，目前痛疼不舒，手指活动不灵活。
诊断：弹响指后期
治疗：用一只动筋针，尺寸为直径 0.30 毫米，长度 40 毫米，斜刺入右侧前臂指伸肌中部，针尖朝向右手背部，做滞针提拉手法，辅助手法是循压法和推拉法，带针运动是五指屈伸法。用另一只毫针，尺寸直径 0.20 毫米，长度 25 毫米，皮下刺入右手无名指指间关节桡侧结节的桡侧边缘，手法做滞针提拉的有限提拉，辅助手法是捻搓法、刮磨法。没用神灯，仅留针 30 分钟，观察到留针 15 分钟时，其结节已经碎化，起针后结节基本消失 80%，起针 1 小时后，腱鞘囊肿消失不见了。
病例分析：我认为动筋针的理法针术对这个病人的弹响指起到了至关重要的作用，所说的理法针术就

是动筋针的理论来源和具体操作。在指伸肌下针是根据经筋理论和激痛点学说。用毫针刺激小关节结节也是运用动筋针的理法针术。《灵枢-官针》:‘恢刺者，直刺傍之，举之前后，恢筋急，以治筋痹也’。此之意就是直接从病灶旁边进针，在病灶表面进行前后进针，疏通经气，剥离黏连组织，消除结节。

五 学习动筋针的临床应用体会

1 我对动筋针的认识，我已经学习应用动筋针一年多，最初的学习动机是看到了动筋针的很多成功病例视频，被神奇的疗效而吸引学习了动筋针。应用后基本能够达到陈德成博士治疗病人的效果，临床疗效大大超过用传统中医治疗痛症，我目前治疗不用电针，不用拔罐，不用推拿就可以快速针刺减痛。

2 我认为学习动筋针的基本要求是要熟练掌握肌肉解剖，能达到事半功倍的作用。另外也要掌握一些传统中医针刺手法，也有很好的辅助疗效作用。

3 要掌握准确的下针点，作为一个好的针灸师，要明白人体哪里是最佳下针点，其次针刺层次的掌握，也是治疗成败的关键，动筋针疗法规定的三部一流程寻找下针点即动筋点，是有实用意义的。动筋针法一般针刺在浅筋膜层，但有些疾病也在深筋膜层或肌肉层。

4 我认为动筋针疗法易学，效果好，适合所有的中医师学习和应用，更适合不懂现代针法的医生。

5 动筋针的临床疗效得到所有学过动筋针医生的认可，甚至没有系统学习动筋针小班的部分医生，照猫画虎，按动筋针的思路操作，也收到了良好的临床疗效。

6 动筋针疗法主要适用于软组织损伤导致痛症，及与软组织相关的杂病。

六 结语

动筋针疗法，源于传统，基于解剖，融会新知，即借手法和特殊针具以松解结节和筋膜组织粘连，又用带针运动以激发经气，从而保持足够的刺激量，效如桴鼓。我们看到了针灸特色疗法的神奇，动筋针疗法对传承和发展中医针灸学做出了极大的贡献。

参考文献

1. 陈德成.动筋针疗法[M].北京，人民卫生出版社，2020 年，3 月
2. 陈德成，李鸣.动态留针的理论依据及其作用机理的研究[J]. 微创医学，2023，18（1）：1-4
3. 陈德成.中国针灸独穴疗法[M].长春：吉林科技出版社，1993 年，9 月
4. Decheng Chen, Guanhu Yang, and Kehua Zhou. Traditional theories and the development of Motion Acupuncture[J]. International Journal of Clinical Acupuncture (USA), 2015, 24(4): 223-227
5. 陈德成，杨观虎，王富春. 试论阿是穴、压痛点和激痛点的关系[J].中国针灸，2017，37
6. Decheng Chen, Guanhu Yang, Xiaochuan Chen, Kehua Zhou. Motion acupuncture for Musculo-skeletal pain: principles and methods[J].European Journal of BioMedical Research（Europe）, 2016, 2: 19-24
7. 薛立功. 中国经筋学. 北京：中医古籍出版社，2009
8. 宣蛰人. 宣蛰人软组织外科学 .上海: 文汇出版社，2003
9. Jenet, G., Travell & David Simons Myofascial Pain and Dysfunxtion: (Vol. 1), The Trigger Point Manual Lip pincott Williams & Wilkins, 1999. 10. 李鸣，陈德成. 动筋针调节颞下颌关节的结构[J].微创医学，2023，18（1）：13-15
11. 陈德成，动筋针法和靶点概述[J].中国针灸，2016，36（9）：941-944
12. 陈德成，杨观虎，王富春等. 动筋针法的靶点治疗[J].中国针灸，2016，36（11）：1177-1180
13. 李艺多，孟晓萍，刘明军，陈德成. 动筋针疗法对老年膝关节炎的即刻止痛效应临床研究[J]. 吉林医学，2020，41（11 ）：2708-2710
14. 原林. 筋膜学. 北京：清华大学出版社，2011
15. [美]Thomas W.Myers 著,关玲 周围金 瓮长水译， 解剖列车 ，北京：军事医学科学出版社 ，2015.4
16. [美]凯尔著.汪华侨,郭开华,麦全安译. 功能解剖学 [M].天津:天津科技翻译出版社,2013.

百万欧元托起欧中中医药协作研究的平台
-记欧盟资助的欧洲中国中医药科研团队（GP-TCM）创立始末

江丹 （英国）

近几年，人们从传媒的报道中都会发现 GP-TCM----欧洲中国（以下简称欧中）中医药科研团队的名字，尤其是从 2014 年底，由欧中中医药科研团队秘书长，英国剑桥大学药理学樊台平博士应聘主编《科学》的补充医学专辑的第一期（Dec 14），第二期（Jan 15），第三期（Oct 15）在国际上隆重发表，为在补充替代医学中最为突出的中医药的现代研究做了一次系列的展示；第一期上北中医校长徐安龙教授的文章《Zheng: A systems biology approach to diagnosis and treatments》更是引起轰动的效应。2013 年四月西方著名的民族医药学杂志（Journal of Ethno - Pharmacology Vol 140, Issue 3）为欧中中医药科研团队出版了有关中医药研究的专刊，该期发表的 20 篇论文全部出自欧中中医药科研团队的成员。所有这些具有国际公认科研手段与研究方法的论文，无疑为中医药在世界范围的弘扬与发展起到了重要的作用。GP-TCM（欧中中医药科研团队）是第一个由中国中医药国家级科研团队参与合作的，汇集了欧洲 20 多个国家的 100 多所大学、科研院所和企业的国际科研团队，是在欧盟科技委员会第七框架计划的支持下产生的。它是利用当代先进的国际科研团队进行中医药研究的成功实践。在这个团队的建立与实施过程中，有中国学术背景的海外学者在其中起到了决定性的作用。以下我以亲历者的身份，介绍这一过程。这些史实提供了中医药国际发展的成就与经验。

1. 欧盟第七框架资助计划 (FP-7) 的发布：（2006，6）

2006 年 6 月，一个中国科技部牵头，由中国科技部与欧盟科技委员会联合主办的“中医药科学研讨会”在意大利罗马召开。由中国科技部及中国驻欧洲各国大使馆科技处邀请的 100 多位代表出席了大会。我作为英国中医药学会 (ATCM) 代表应邀出席了大会。在这个会上，中国科技部公布了其将在 5 年内实施，总计 20 亿美元的《中国中医药科学技术国际合作发展》的资助计划。但是中国的科技合作计划，立足于资助中国的科研团队，国外的科研团队实际上只是望梅止渴而已。

在同一会议上，欧盟科技委员会则出乎意料地抛出了他们的第七框架 (Frame Program 7th, FP7)资助计划。所谓框架资助计划，是欧盟制定的一项专门资助项目。这个计划以 100 万欧元，三年为期，资助在某一个学科领域进行国际间的交流与协作，促进该学科的发展。这个计划已经成功实施了六次，它资助的科学研究领域涉及 100 多个学科。这次欧盟将这一资助计划向中医药开放，旨在搭建欧中合作平台，探讨对中医药研究的现状、问题及其解决方案，建立技术规范，提出优先发展的领域，并且为欧洲和中国政府进一步决策提供科学依据。这实在是个绝好的机遇。中国国家级中医药科研团队这次是有备而来，在会上就选定了将与其合作的欧洲的科研团队。我在会上将这一资助计划的具体细则、要求、征集申请的截止时间等重要信息记下，交给了我的中医药科研合作伙伴，英国伦敦国王学院的徐启和博士。

徐启和博士是中国人民解放军军事医学科学院毕业的医学博士，多年前来伦敦国王学院作肾病病理学博士后。由于他发明了一种脏器纤维化的试验模型，因此多年来他已经在英国、美国多个实验中心应用他的模型筛选抗脏器纤维化的有效药物。可是他筛选了现有的许多相关西药化学药物，其中有效者，却都因为严重的毒副作用而不能用于临床，因而徐转向中草药的筛选研究，我们已有多年的合作。所以现在已担任伦敦国王学院肾病实验室主任的徐博士已经是在西方较早进行中医药研究的学者了。

2. 为建立欧中中医药研究的平台力争 PF-7: (2007, 2)

徐博士申请欧盟科技委员会的这个资助计划受到了他的导师：国王学院药理学系主任 Peter Hyland 教授，与肾病系主任 Bruce Hendry 教授的支持。不过这两位教授虽然认为搞中医药研究可能有意义，有前途，但是对是否能够拿到这项资助缺乏信心。特别是还要花费那么多的时间与精力去组团申报，他们有些踌躇。这时徐博士当机立断：由他来牵头，做项目申请的总协调人。在徐博士的努力下，在以上两位教授的支持与国王学院科研处的帮助下，仅在不到一个月的时间内，就组成了汇集欧洲 13 个国家，十几个科研团队，几十名科研人员的最初的欧中中医药科研团队(GP-TCM)， 以‘后基因时代中医药的良好实践’为题目，申报了欧盟第 7 框架的学科资助计划 。我为团队介绍引进了两个中国的有实力的中医科研团队：北京中医药大学作为中国国内的中医药机构，最先给予了积极的支持，牛建昭教授率领的生化研究团队，乔延江教授率领的中药研究团队，和在神经生理学方面对经络实质研究有成就的北京首都医科大学等中国科研团队成为了来自中国的两个创始团队成员。

经过申请此资助计划的众多团队的激烈竞争，以英国伦敦国王学院牵头的：‘后基因时代中医药的良好实践’团队以“团队构成、研究设计、前期筹备、预定

实施方案”等各项目总评成绩第一的优异成绩胜出，于 2007 年 2 月，获得了欧盟科技委员会的批准，成为从第七框架资助计划各申报团队中脱颖而出的唯一赢家。这个资助计划的获得也是中医药科研团队在欧洲获得的第一个高规格的项目资助——百万欧元。由英国伦敦国王学院牵头，举起的这面中医药科研大旗，在很短的时间内，就吸引了欧洲范围内众多有兴趣，有能力从事中医药科研的团队的加盟，形成了一支全方位，多学科，高水准的中医药科研综合团队。我也以中医临床专家的身份，成为了其中 WP6（临床研究组），WP8（针灸研究组）的享受课题资助的成员，并且担任 WP6 的副协调人。英国中医药学会主席沈惠军也代表 ATCM 加盟了团队。北中医的牛建昭团队、乔延江团队、刘建平团队，以及后来加盟的徐安龙团队等都先后在 GP-TCM 的相应合作组中占有位置，成为了国内中医研究机构中参与团队最多的单位。

3. 集欧洲中医药科研最大阵容与中国中医药研究“国家队”，强强联手建立欧中中医药科研团队-----GP-TCM: (2009, 1)

2009 年 1 月，在北京召开了欧盟第七框架资助下正式成立的欧中中医药科研团队 (GP-TCM Consortium) 的启动会议，欧盟科技委员会、中国科技部、中国中医药管理局相关负责人出席了会议。中国医学科学院、中国中医科学院的中国中医药研究“国家队”，以及两岸四地的中医药研究的知名学者也都受邀加盟，形成了汇集欧洲 20 多个大学，科研机构，和中国中医药科研“国家队”强强联手，密切合作的欧洲中国中医药科研团队（GP-TCM Consortium）。

这个团队以徐启和博士担任总协调人，剑桥大学台湾籍药理学家樊太平博士任秘书长。在由著名专家教授参加的指导委员会的领导下，涉及中医药研究的各个学科，形成了 GP-TCM 的组织结构。 例如：由伦敦植物园英国药用植物研究中心牵头的 WP1（Working Package 1，下同）---中药质量控制研究组；由德国杜塞尔多夫的翰瑞克，哈尼大学药理生物研究所牵头的 WP2--- 中药提取物与有效成分分析研究组；由中国医学科学院植物所牵头的 WP3--- 中药毒理研究组； 由英国国王学院药学院牵头的 WP4---- 中药分子生物学实验室研究组；由西班牙阿卡拉大学医学院生理学系牵头的 WP5--- 中药动物实验研究组；由英国南安普顿大学及沃瑞克大学结合医学研究中心牵头的 WP6--- 中药临床研究组；由英国剑桥大学药理学院牵头的 WP7--- 中医药政策法规研究组；由中国北京首都医科大学牵头的 WP8---针灸研究组；由荷兰莱顿大学负责的 WP9 ---最终年会筹备组；以及由徐启和博士领导的 WP10--- 团队整体管理与协调中心。每个研究组都有 4-5 个获得资金支持的，和 5-10 个尚未获得资金支持，但在同一领域进行研究的团队组成（6）。

4. GP-TCM 的成果展示，及其研究的开创性意义（2012，4）

三年来，汇集欧洲几十个大学和研究机构科研力量的 GP-TCM 团队；充分利用欧洲高等院校和科研机构的先进的科研设备和有利地位，在欧洲开展工作。GP-TCM 建立了自己的网站，各国的团队成员可以自由地随时上网讨论；GP-TCM 办公室也及时将各种研究信息放到网上，供大家分享。各个研究组定期召开小型讨论会、电话会，在各研究领域及时进行学术交流，开展科研合作，共同对研究中的热点，难点进行切磋，探索。GP-TCM 还每年召开年会，在英国、葡萄牙、荷兰分别召开的三次年会上，每个研究领域合作组都汇报他们的研究进展、研究成果与研究计划，并且进行全 GP-TCM 团队科研人员的共同讨论。

三年来的交流应该说在以下几个方面构成了特色：

1. 确定中医药目前的研究水平，选择与世界接轨的中医药研究的优先领域：

各研究组分别进行了该领域当前的研究综述，并且根据可能性，研究结果的使用价值等做出了下一步研究的计划，并且确定了优先研究的领域。并且通过对中医药古代和现代文献的调研分析，以及各类的研讨会，去粗取精，去伪存真，求同存异，探讨在后基因时代如何建立适合的质量控制、疗效和安全评价的技术规范。

2. 为中医药在欧洲的发展，管理奠定理论与科学基础：

WP1 伦敦植物园药用植物研究所设立有专门的中药鉴定中心。她们建立了 300 多种常用中草药标本库。在由他们牵头领导的 WP1 中药质量控制研究组中，他们与欧洲其他国家和来自中国的科研团队相互交流合作，对每种草药不仅从文献资料上确定它们的原产地、植物学特性、药物功用，而且专门到中国的真正原产地采来地道样品。这里已经建成了对中医药从植物学角度鉴别、认证的权威中心，并且建立有与中国的课题团队经常交流合作研究的固定模式。

WP3 成员伦敦汤姆 . 盖医院的中药临床应用检测中心，接受来自全英国的对中药临床应用可能的毒副作用的报告，同时检测，甄别与认证中药在临床应用中的可能的毒副作用。几年来，他们接受了一百多例中药在临床应用中被怀疑可能的毒副作用的报告，都一一的认真进行了调研，以及必要的药理学检测，为中药的临床应用做出了最确切的评定。这些研究机构，以及他们的工作成果，都为英国政府对中医药业进行法定立法管理，对欧盟制定的草药管理法规的实施方案制定，提供了重要的科技数据。为了和谐

国际中草药管理规范和市场准入标准，GP-TCM 还组织来自世界各地（中、欧、美、澳）食品和药品管理机构的中草药注册管理官员和专家展开定期的，富有成效的研讨，促进对话与合作。

3． 建立欧洲中医药科研人员与中国科研人员交流的平台：

由于欧中中医药科研 团队所建立的经常的学术交流机会，使欧中中医药科研人员可以有机会经常直接交流，就可能使彼此重大的科研难点，通过获得对方的研究信息而容易解决。例如，西方的科研人员对多年来反复报道的中药的毒副作用有较多的顾虑。像附子，被报道有对心脏的毒性作用，那在欧洲就只有禁用。可附子在临床是治疗风湿病必不可少的药物，禁用附子，将大大影响中医对风湿病这种西方高发病症的治疗效果。在 GP-TCM 的第二次年会上，在欧洲科研人员提出的询问：对于附子这种有重大毒副作用的中药，在中国为什么还在正常应用？ 特邀嘉宾，中国药监会副主任，著名的中药鉴定专家钱中直教授解释说：对于附子的毒性作用，我们已经通过药理学的工艺制作技术，解除了附子结构中与产生毒副作用有关的两个生物链，可使附子的毒性减低 2000 倍。所以经过炮制的附子，一般不会有毒副作用，可以临床应用。这个简明的科学解释使在座的众多欧洲药理学家表示信服。

经络的实质和针灸的作用机制，被 GP-TCM 邀请的牛津大学著名的药理学家提出的新的生物学理论所证实。牛津大学退休的药理学家 Prof Geoffrey Burnstock 倾其毕生精力对生物体中能量代谢的重要物质 ATP 进行研究，发现：以 ATP 为主导的能量代谢系统才是针灸作用的真正受体。他的研究证实了针灸的疗效是通过刺激，调整人体的能量代谢来实现的，而 ATP 正是可以用来检测，跟踪人体内能量代谢的标志性物质（7）。他说：我从 1950 年代起，就开始这项研究，可是不被西方主流医学界认同与支持。近年他通过他的中国学生与中国上海第二军医大学学术团队合作，并且在国际学术期刊不断发表日渐更新，充实的理论，渐渐引起越来越多的西方主流医学团队的重视与响应。在欧中中医药科研团队的年会上，学者们纷纷与老教授进行了更加深入的探讨与切磋。

GP-TCM 团队中的欧洲科研人员多数与中国的研究团队建立了固定的研究合作关系，许多人一年要四，五次去中国讲课，合作指导研究生，参加在中国主办的各种国际学术活动，联合申报中国政府的中医药合作项目的资助计划，促进了中国在中医药领域的国际发展。 2011 年 10 月，由 Prof Nicky Robinson 领导的 WP6 临床研究组与首都医科大学王晓民校长领导的 WP8 针灸研究组的学术交流会在北京召开，会后全体与会人员参加了北京市主办的世界针灸学大会。GP-TCM 团队 20 多名来自欧洲的中医研究专家与北京市的中医，针灸工作者进行了更加深入的交流，也使北京市主办的国际交流大会开得更加丰富多彩，富有成效。北中医的刘建平教授团队，徐安龙校长团队都与（或将与）英国的科研团队建立永久的合作关系。

4. 把中医药的研究成果向西方科技界传播：由樊太平博士主编，定期出版的欧中中医药科研团队会讯 Newsletter，向各国科研人员及时通报中医药研究的信息；GP-TCM 办公室也经常将欧盟科技委员会的资助计划方案及时通报，使各国科研人员可以获得申请课题资助的信息与途径。

由于相互交流而建立的欧中科研团队合作研究的课题则兼取各方的优势，使课题的设计更加富有新意，更具说服力。 例如在欧洲中医临床研究中，常常由于中医药，针灸属于补充医学，不在主流医学之内，因而进行较大样本的针灸、中医临床疗效的客观指标验证有困难。建立了与中国同一领域的研究团队的合作关系之后，我们就可以用来自中国中医医院采集的病例，与在西方诊治的病例按照同样的西医疾病与中医诊断证型诊断，施以同样的治疗方法，治疗周期，与客观判断指标的观察，这样的治疗结果，经过进一步的数理统计分析，写成论文，在西方的科学期刊发表，就会更有说服力。科学家们逐步加强对中医药的传统内涵和科学价值的理解，使中医药研发进入欧洲主流科学界的基础开始形成。

GP-TCM 的许多团队都有自己的研究特长，与学术论文发表的声誉，因而每个团队都不断地把自己的研究报告在国际期刊上发表，形成了对中医药研究的正面影响。三年来，据不完全统计，除 2014-2015 在《Science》的补充医学专刊，2013 年在《Journal of Ethno-Pharmacology Vol140, Issue3》发表的 GP-TCM 专刊之外，团队成员共发表研究论文 179 篇, 出席国际学术大会，进行大会学术报告 132 例；作为中医研究领域的专家，出席国际的研究咨询项目，担任相应机构的咨询专家 29 人次；申请中医领域研究的专利 2 项，并积极探讨成立专门资助中医药现代化研究的 GP-TCM 国际“慈善基金”的可能性。目前 GP-TCMRA 已与世界中医学会联合会合作创建了全英文国际期刊---World Journal of TCM，并获得国家中医药管理局的资助计划的支持，已经成功面向世界发行。

5. 欧洲中医药规范化研究学会的产生与发展：

到 2012 年秋，欧盟第七框架资助计划就要结束了。如何让这只已经聚结的欧中中医药研究团队存在下去，让这些已经建成的科研人员合作交流机制能够延续下去当年 5 月在荷兰召开的 GP-TCM 第三次年会上，欧中中医药科研团队通过协商，成立了“中医药规范研究学会”(GP-TCM Research Association)。奥地利格拉茨大学药理学家 Rolduf Burd 教授被选为首

届主席，中国医学科学院中药研究所年轻的药理学专家果德安教授为现任主席。欧中中医药科研团队(GP-TCM consortium) 的组织结构将以“中医药规范研究学会”的形式继续存在下去，已经建立的合作模式也将在学会的领导下，继续获得支持与巩固。

北京中医药大学在徐安龙校长的领导下，成为了中医规范化研究学会的创始团体会员，并且是其中最为活跃国内研究机构。2014 年 7 月在南京召开的中医药规范化研究学会的年会上，由徐安龙校长亲自带队，北中医以生化、中药两个团队的强大阵容出席，并且发表具有国际领先水平的中医药研究成果，在 GP-TCMRA 的研究人员中受到高度评价。

百万欧元 —— 欧盟第七框架资助计划经过三年的实施，它所建成的在欧洲进行中医药研究的平台 —— 中医药合作研究团队将会继续存在下去，身在其中的这些多国别的科研人员将为中医药在国际上的发展，在世界范围内继续努力。

GP-TCM 的网站：http://www.gp-tcm.org

参考文献：

1. Institute of Medicine of the National Academies, Evolution of Translational Omics, Lessons learned and the Path Forward, Report Brief, March 2012
2. Uzuner H, Xu Q etc, Traditional Chinese Medicine Research in the Post-genomic Era: Good Practice, Priorities, Challenges and opportunities J Ethno pharmacology, 2012, 140, P 458-468
3. Zhao Z etc, The Formation of Daodi Medicinal Materials, J Ethno pharmacology, 2012, 140, P 476-481
4. Buriani A etc, Omic Techniques in Systems Biology Approach to Traditional Chinese Medicine Research: Present and Fortune, J Ethno pharmacology, 2012, 140, P 535-544
5. Robinson N etc, Exploring Practice and Research Priorities of Practitioners of Traditional Acupuncture in China and the EU-A Survey, J Ethno pharmacology,2012, 140, 604-6
6. Ordinary office of GP-TCM, SEVENTH FRAMEWORK PROGRAMMETHEME [FP7-HEALTH-2007-2.1.2-7]
7. Burnstock G etc, 50 Year of Passionate Commitment, CMLS (Cellular and Molecular life Science), 6 (2004), 1693-1696

江丹毕业于北京中医药大学中医系 1975-78，留校；78 级各家学说与 84 级中医诊断学硕士，获硕士学位，北中医教师。1991 年赴英，现英国注册针灸师，中医师。伦敦中萨大学中医院副院长，英国哈拉姆中医研究所所长，世中联授予中医主任医师，北中医客座教授；欧洲中医专家委员会副主席，欧中中医药科研团队中医临床专家，世中联常务理事，北中医欧洲校友会主席。

ATCM 2023 曼城年会（Manchester AGM）
—中医创新与临床技艺的交流盛会
The Summit of TCM Innovation and Clinical Skills Exchange

由美的公司冠名赞助的 ATCM 2023 年年会暨学术研讨会于 10 月 7 日和 8 日在曼彻斯特成功举办。本次学术研讨会以“推广创新针法及中医治疗疑难病症”为主题。国内知名专家刘清泉教授和程海英教授通过在线会议平台分享了他们在新冠和头痛治疗方面的临床经验，江丹教授对英国中医诊疗优势病症进行了系统的分析总结，Dr Lily Lai 分享了针灸治疗多囊卵巢综合症的研究与临床经验。在 8 日下午的分会场，吴继东、张亚峰、王迎、刘会安、聂卉等英国新针法领军人物进行了浮针、腹针、腹诊、头针、动筋针的现场传授，仲拥军医师进行了推拿手法的交流演示， 这些临床技能的现场互动将会议推到了高潮。会员们在一起畅叙友情，交流技艺，其乐融融。

The ATCM 2023 Annual Meeting and academic conference, sponsored by Midea Group UK, was successfully held on October 7th and 8th in Manchester. The theme of this academic conference was "Promotion & Application of Innovative Acupuncture Treatment and TCM Treatment of Intractable Diseases." Renowned domestic experts Professor Liu Qingquan and Professor Cheng Haiying shared their clinical experiences in the treatment of COVID-19 and headaches through an online conference platform. Professor Jiang Dan conducted a systematic analysis and summary of the advantages of TCM diagnosis and treatment of common diseases in the UK. Dr. Lily Lai shared her research and clinical experience in acupuncture treatment of polycystic ovary syndrome.

In the afternoon session on the 8th, leading figures in innovative acupuncture techniques in the UK, including Wu Jidong, Zhang Yafeng, Wang Ying, Liu Hui'an, Nie Hui， conducted on-the-spot instruction in FSN, abdominal acupuncture, abdominal diagnosis, sculp acupuncture, and motion needling, Dr. Zhong Yongjun provided a demonstration of Tuina techniques. The live interaction of these clinical skills brought the conference to a climax. Members gathered to share friendship, exchange expertise, and enjoy a harmonious atmosphere during the event.

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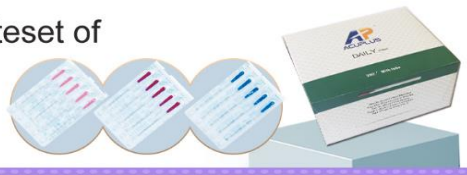

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