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珍惜时间 珍惜生命

中医

目前英伦三岛新冠疫情严重，战胜疫情刻不容缓。作为在英已创建三十年中药品牌的时珍中医药批发首当其冲，义不容辞。我们广泛征求国内外专家的意见和建议，精挑细选，在英全面推出中国抗疫经典方，为英国人民和在英华人提供全方位服务。针对不同阶段病情，首批推出以下方剂，供大家选择：

扶正解毒合剂

国内一线抗疫医护人员每日服用用于预防，效果显著

成分：黄芪、防风、炒白术、藿香、金银花、连翘、甘草、陈皮等。

功能与主治：扶正祛邪，清热解毒。用于免疫力底下，呼吸系统易感人群，流感季节使用。

用法用量：该方为浓缩粉片剂，服用方便。早晚各 3-4 粒，一瓶为 7-9 天的服用量。

适用于早期症状缓解与治疗

成分：柴胡、黄芩、法半夏、太子参、连翘、金银花、防风、黄芪、炒白术、甘草、生姜、大枣、桔梗、荆芥、贯众等。

功能与主治：清肺透热，益气固表。适用于流感、（支）气管炎、肺炎初期等疾病肺卫不固，邪热犯肺症人群。症见低热或无热，微恶寒，口渴，咽干，咽痒，咳嗽，胸闷，自汗，舌苔薄白或微黄，脉数。

用法用量：该方为浓缩粉片剂，服用方便。早晚各 3-4 粒，一瓶为 7-9 天的服用量。

柴胡抗感合剂

中国卫健委《新型冠状病毒肺炎诊疗方案（试行第七版）》推荐方剂：

莲花清瘟胶囊

轻症和普通型

性状：本品为硬胶囊，内容物为棕黄色至黄褐色的颗粒和粉末，气微香，味微苦。

功能与主治：清瘟解毒，宣肺泄热。用于治疗流行性感冒属热毒袭肺证，症见：发热或高热，恶寒，肌肉酸痛，鼻塞流涕，咳嗽，头痛，咽干咽痛，舌偏红，苔黄或黄腻等。

用法用量：口服，一次 4 粒，一日三次。一盒为两天的服用量。

轻型、普通型；重症、危重症

成分：麻黄、炙甘草、杏仁、生石膏（先煎）、桂枝、泽泻、猪苓、白术、茯苓、柴胡、黄芩、姜半夏（特级）、紫菀、冬花、射干、山药、枳实、陈皮、藿香。

包装：一付 196 克。

功能与主治：适用于轻型、普通型、重症患者。

服用方法：传统中药饮片，水煎服。每天一付，早晚两次（饭后四十分钟），温服，三付一个疗程。如有条件，每次服完药可加服大米汤半碗，舌干津液亏虚者可多服至一碗。（注：如患者不发热则生石膏的用量要小，发热或壮热可加大生石膏用量）。处方来源：国家卫生健康委办公厅

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英国时珍中医药批发有限公司

联系电话：0161 2098 118

邮箱：orders@shizhen.co.uk

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英国中医药学会

The Association of Traditional Chinese Medicine and Acupuncture UK

地址 Address: ATCM, Suite 1, The Brentano Suite, Solar House,, 915 High Road, North Finchley, London N12 8QJ

电话/传真 Tel/Fax: 0044 (0)20 8457 2560

微信 WeChat: ATCM-OFFICE

电子邮件 Email: info@atcm.co.uk

网站 Website: www.atcm.co.uk

浮针免疫机制再探

徐文博 英国经纬诊所

摘要：目前，对于浮针的作用机制有多种学说，诸如患肌理论（包括引徕效应、液晶态理论）、神经闸门学说、树突状细胞网络学说等等，各种学说都试图从不同的角度解读浮针的作用过程。本文在“浮针免疫机制理论”的基础上，从蛛网假说、理论依据、临床证据、临床意义等几个方面，进一步探讨机体的免疫系统在浮针治疗过程中的重要角色，以及这一理论对于浮针临床可能的启示。

关键词：浮针 免疫机制 蛛网假说 结缔组织 自我修复

Further Discussion on the Effect of FSN to Immune System

Wenbo Xu Meridian Clinic UK

Abstract: There are currently quite a few theories behind the efficacy of Fu's Subcutaneous Needling (FSN). These include Yin-Lai effect, Liquid-Crystal theory, Neural gate theory, Dendritic cell web hypothesis etc, each offers its own angle in the understanding of mechanism to FSN acupuncture. This article tries to have a further discussion on the effect of FSN to immune system through the following aspects: spider web hypothesis, theoretical support, clinical evidence and clinical significance. It demonstrates what an important role the human immune system may play in the FSN treatment, as well as how this theory can impact FSN's clinical potential.

Key words: FSN immune mechanism Spiderweb hypothesis Loose connective tissue Self-repair

浮针，自诞生以来，因为它可靠的疗效，受到越来越多业界人士的关注，这不但表现为人们对于学习浮针技术及临床应用的热心，也包括引起了大家对于浮针作用机制研究的浓厚兴趣。

目前，有关浮针作用机制的公开报道的主要学说有患肌理论（包括引徕效应及液晶态理论）、神经闸门学说、免疫机制假说、树突状细胞网络学说等。笔者在 2017 年公开发表了“浮针有可能是通过刺激皮下疏松结缔组织（浅筋膜），来影响机体的免疫与组织修复机制，从而达到治疗病痛的目的”的这一观点，即“浮针免疫机制学说”（徐文博 吴继东，2017），本文将在此基础上，通过蛛网假说、理论依据、临床证据和临床意义等方面，就这一观点作进一步的补充、论证和探讨。

1. “浮针免疫机制说”的基本内容

该观点的基本内容如下：根据浮针疗法的特点，浮针的作用部位主要集中在机体的皮下，即皮下疏松结缔组织，而浮针的治疗，正是通过刺激（微创）这一特殊的组织部位，唤醒、激活机体免疫和组织修复机制，引起包括组织炎症反应、再生修复在内的免疫应答，加强和促进了机体清除抗原（包括坏死、异变细胞组织及引起“患肌”的病理因素）和修复组织损伤的能力，从而达到促进和加快组织损伤和机体功能康复过程的目的（图表 1）。



图 1 浮针免疫机制

2. 蛛网假说

为了更加形象地描述以上“机制”，笔者设计了如下虚拟实验，称之为“蛛网实验”：有这样一张因被昆虫冲撞或风雨侵袭而留有破洞的蛛网（图 2），蜘蛛正躲伏在它的巢穴内休息。这时我们用一根草棒轻轻触碰（刺激）一下蛛网，就会发现，蜘蛛迅速对这一触碰做出反应，冲出巢外，扑向“刺激源”，即草棒触碰处，它以为捕捉到了“猎物”。当蜘蛛并没有发现草棒入侵处存在猎物，而是注意到附近的蛛网破洞处粘着一只小蚊子，便会毫不犹豫地爬过去，吞噬掉蚊子；如果心情好的话，它也许会顺便修补好了网洞。现在，蚊子没了，蛛网又成了一张完整健全的网（图 3）。



图2 蚊虫破损的蛛网



图3 完整健全的蛛网

众所周知，机体的疏松结缔组织也是一个连续的遍布全身各器官组织的网络（图4），无论在形态还是功能上都与蛛网有着极度相似的方面。所以，笔者在这里用草棒干扰蛛网引起蜘蛛反应的过程，来比喻浮针刺激皮下疏松结缔组织导致免疫反应的经过。在实验中，蛛网就是疏松结缔（筋膜）组织，网洞就是病灶（包括患肌），蚊子就是外侵物或致病源，蜘蛛就是免疫系统，草棒就是浮针。



图4 蛛网与筋膜

3. 理论依据

“浮针免疫机制”的观点是建立在已有的医学理论和生理学研究成果基础上的，其理论依据主要在于以下几点。

3.1 浮针治疗的作用基础是机体的自我修复（自愈）功能

机体具有自我修复和自愈的能力，这是一切治疗取效的基础。这个观点，已经越来越广泛地受到医学界的重视和被接受。其实，中医在两千年前就认识到了这个道理，所谓“正气存内，邪不可干”（《素问遗篇·刺法论》），“邪之所凑，其气必虚”（《素问·评热病论》），这里的“气”是指正气，即人体的抗病和自愈能力。

生物体不存在没有功能的结构，更不存在无结构的功能（朱兵，2015），任何功能的实现必有其结构的基础，而疏松结缔组织就是机体自愈力的载体和结构基础（符仲华，2016）。浮针治疗，对于机体提供的只是一种机械刺激（人为微创），并无任何附加药物的介入或手术的干预，所以，浮针的治疗作用只能全部是通过影响机体的自愈和自我修复能力而达到目的，浮针刺激所做到的只是通过疏松结缔组织这个载体，来激发和促进机体的这种自愈的功能和过程。

3.2 修复能力是机体免疫功能的重要组成部分

一般来讲，免疫功能包括三个方面的内容，即免疫防御（immune defence）、免疫监视（immune surveillance）和免疫自身稳定（immune homeostasis）。免疫防御，是指机体防止和清除病原体（如细菌、病毒、真菌、支原体、衣原体、寄生虫等）及其它有害物质的能力；免疫监视，指机体能够随时发现和清除体内“异己”，如肿瘤细胞、衰老、凋亡、坏死细胞等；免疫自身稳定，则是指机体具有通过自身免疫耐受和免疫调节两种主要机制来达到免疫系统内环境的稳定，即免疫系统通过免疫耐受可以区别“自身”和“非己”，保证不对自身组织细胞产生免疫应答，又通过免疫分子、细胞的调节作用及免疫-内分泌-神经的相互作用与调节来维持稳定与平衡（曹雪涛，2017）。

有研究表明，机体的免疫功能不再仅仅是防御

病原体入侵，而且是机体组织发育、自身稳定、损伤修复必需的条件。从19世纪末 Metchnikoff 发现巨噬细胞在组织修复中扮演重要角色以来，免疫细胞参与组织修复已经被公认；新的研究进展则显示免疫系统参与调制组织再生的新机制。近年来，人们对于免疫系统有了越来越多的认识，发现免疫细胞和体液成分

同时可以促进受损组织的再生（Arin B.Aurora et al, 2014）。

3.3 皮下疏松结缔组织是机体的“免疫库”

既然浮针主要作用部位是皮下疏松结缔组织，那么它的治疗作用一定与这个组织层的组织学特点

有着密切的关系，也可以说，这个组织层的结构与功能在浮针的治疗过程中很可能起着决定性的作用。疏松结缔组织由间质（包括纤维和基质）与散布其间的细胞共同组成（图 5），而其细胞成分主要有 7 种：成纤维细胞（fibroblast）、脂肪细胞（adipocyte）和间充质干细胞（MSC）属于固定细胞，是参与细胞和组织的分化和再生细胞；另外的四种细胞巨噬细胞（macrophage）、肥大细胞（mast cell）、浆细胞（plasmacell）和白细胞（leukocyte）属于游走细胞，都是免疫细胞。这些免疫和再生细胞，在受到刺激、创伤和外物入侵时会被激活，发生免疫反应和产生细胞分化再生，参与机体的免疫应答与调节以及组织的再生与修复（图 6）。所以，笔者认为疏松结缔组织事实上相当于机体的一个“再生工厂”和“免疫库”。

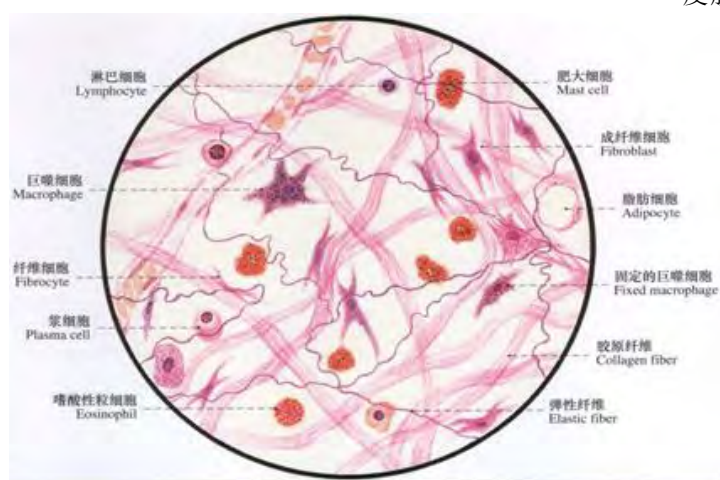


图 5 疏松结缔组织（镜下）

细胞	巨噬细胞	吞噬、清除外来致病物质、细胞残渣，促进有效组织再生；分泌多种免疫因子；调节免疫应答。被称为“职业免疫细胞”
	肥大细胞	重要的免疫细胞，参与机体的过敏反应，被认为是固有免疫的“哨兵”，通过分泌细胞因子与炎症介质实现其功能
	浆细胞	来源于 B 淋巴细胞（被激活），产生免疫球蛋白和细胞因子，参与体液免疫
	白细胞	具有吞噬功能，可吞入并杀伤或降解病原体及组织碎片，某些白细胞还可以分泌白细胞介素、干扰素、肿瘤坏死因子，参与免疫反应的调节
	成纤维细胞	产生纤维和基质
	间充质干细胞	主要存在于皮下结缔组织，被激活，可调节免疫反应，参与组织消炎、修复、再生的过程
	脂肪细胞	参与储存脂肪和组织再生
间质	纤维：包括胶原纤维、弹性纤维和网状纤维	
	基质：蛋白多糖、糖蛋白和组织液	

图 6 疏松结缔组织构成

间质是由胶原纤维、弹性纤维及网状纤维等三种纤维和基质共同组成的网络组织。这种被称为人体最大“器官”的组织，遍布全身，链接每个器官组织甚至细胞，从外到内，从皮肤到内脏。间质有以下特点：这种兼具弹性和韧性特点的组织，既是重要的营养通道，又是免疫防御的重要屏障。最近，美国科学家研究发现间质内充满液体（基质），具有传导特性，证实它不仅是癌细胞扩散的必经之路，而且是各种信息包括完成结缔组织内免疫物质的组织间传递的重要通道，对免疫过程有着极其重要的意义（Petros C. Benias et al, 2018），为浮针免疫机制论提供了新的、有力的理论依据。

3.4 神经肽及神经介质参与免疫反应

皮肤和皮下组织内的神经末梢在受到外界刺激后向周围组织内释放神经肽，可产生风团和红斑等局部免疫反应。同时，神经肽可以聚集、趋化中性粒细胞和巨噬细胞等固有免疫细胞而参与机体的免疫反应（朱兵，2015）。感觉神经末梢被损伤或刺激后分泌的神经介质不仅对疼痛和营养具有调节作用，而且对免疫调节也扮演重要角色，而自主神经介质如血管活性肠多肽（VIP）不仅具有强抗炎作用，而且被发现可以抑制 T 细胞的增殖和转移，而参与免疫调节（Paul W. Ackermann, 2013）。

4. 临床证据

4.1 浮针治疗软组织损伤性疾病具有可靠的疗效

对于软组织损伤，浮针治疗已经取得了巨大的成功，目前为止已经有大量研究报道和足够的证据证明浮针对于诸如踝扭伤、腰扭伤、网球肘等各种肌肉损伤等组织损伤性疾病具有可靠的良好疗效（符仲华，2003；刘明莹等，2014）。那么，反过来讲，这个事实也充分说明浮针治疗一定是促进和帮助了损伤组织的修复和再生的功能和过程，否则病症的疗效和痊愈便无从谈起。

4.2 浮针治疗许多内脏器官病症有较好的疗效

浮针对一些脏器的器质性组织的病变如眼底黄斑变性、面瘫等治疗有明显的功能改善和确切疗效（符仲华，2016），这必然是

是以病变组织的改善、修复为前提的。当然，这仍然有待于将来在针对这类疾病的组织学方面的研究

予以证实,因为目前为止,相关的研究还仅仅停留在临床观察的水平上。

4.3 浮针对某些自身免疫性疾病也有一定疗效

已经有一些个案报道,浮针对克隆病等自身免疫性疾病的治疗有效(符仲华,2018),这可以被看作浮针影响免疫功能的直接证据。当然这方面的报道,还只是局限于少量个案,仍需要大样本的临床和实验研究数据的证实,但这至少说明,浮针是影响到了免疫系统或对免疫系统有一定的调节作用的。

5. 临床意义

浮针的“蛛网机制”,对于浮针在临床中的应用可能有如下的启示:

5.1 浮针进针点在近病灶健康部位的肌肉移行处疗效可能更高

根据筋膜组织的“蛛网”特性,在机体的任何部位的皮下进行针刺刺激都可能引起或多或少的机体免疫反应,因而也会起到或大或小的治疗作用,这与近年来针灸界提出的人体无处不是穴的“泛穴”现象和“泛穴理论”是一致的(李永明,2018)。但是,连续的正常的“网络”(组织)较之破损的网络对于信息的传导会更快、更准确,所以进针部位应当选在接近“病灶”的健康部位,而且距离“病灶”越近,浮针刺激所致的局部免疫效应助力于病灶修复再生的几率和效率就会越高。

另外,肌肉移行部位,亦即是疏松结缔组织(筋膜)交汇处,是免疫信息汇集的枢纽和传布的要道,所以刺激该部所获得的机体反应就会更强烈,传导效率也会更高。其实,黄帝内经中已反复提到过“分肉之间”的概念,比如“经脉十二者,伏行于分肉之间,深而不见”(《灵枢·经脉》),“岐伯曰:此皆尝有所伤于湿气,藏于血脉之中,分肉之间,久留而不去。”(《灵枢·贼风》),“肉之大会为谷,肉之小会为溪,肉分之间,溪谷之会”(《素问·气穴论》)等等,很多医家对于“分肉之间(又称肉分之间)”理解为“经脉的循行部位”,但也有学者认为,这其实就是当时腧穴的概念,即施针部位(张树剑,2011),如此说来这里“浮针取肌肉移行部位”的观点也正合了针灸回归“本态”的理念。

5.2 浮针不但对“患肌”相关病痛有很好的疗效,而且可能对非“患肌”所致的内脏器官疾病的治疗也会有帮助

浮针的主要刺激部位是皮下疏松结缔组织,而疏松结缔组织不但是链接全身器官组织的网络,而且是传递信息(机械、物理、化学信息)的重要通道,牵一发可动全身。由于免疫细胞的趋灶性,受到浮针刺激而引发的免疫信息正是通过结缔组织网络传导到各有关病损器官组织,从而促进疾病的康复的,这正如蜘蛛可以通过蛛网接受刺激和猎物信息,并前往蛛网的任何粘住蚊虫和有网洞的区域,吞噬蚊

虫和修补网洞是一个道理。

5.2 浮针疗效需要适宜的刺激量

正象草棒对于蛛网的刺激,力量过小的话,就不足以唤醒蜘蛛或引起蜘蛛的警觉,针刺如果没有足够的刺激量便不能够达到预期的效果,这也是通常情况下浮针疗效优于传统针刺的主要原因之一。严格地讲再灌注活动也具有增加浮针的刺激量的性质,而浮针留管一定程度上就是延长刺激的作用时间,可以弥补浮针包括再灌注的刺激量的不足,以增加疗效。当然,如果刺激量过大,比如过度再灌注则会导致不必要组织损伤,不但影响效果,有时可能会加重病情,也正如对于蛛网,过大力度的草棒冲撞可能给蛛网带来不必要的破坏,而增加蛛网修复的难度,所以,临床中也要引起注意。“最佳刺激量”有个体差异,因人而异。

5.3 浮针治疗具有局限性

浮针治疗只是通过激发、促进免疫系统的自我修复功能来帮助机体康复的,所以它的作用是有限的和有条件的,比如对于免疫缺陷、恶性肿瘤、器官功能衰竭的病症等,浮针恐怕难有作为。再拿蛛网和蜘蛛来说,如果蜘蛛伤残、病重、昏迷,或蛛网经风吹雨打,破坏严重,任草棒如何刺激,也是很难达到唤醒蜘蛛和修复蛛网的目的了。

5.4 浮针影响感染性疾病的可能性

浮针医学明确指出感染性疾病是浮针的绝对禁忌(符仲华,2016),但并没有给出做出这一判断的根据,分析不外乎如下几种可能:

- 浮针治疗感染性疾病有过研究,但结论是无效。
- 没有证据表明浮针可以促进感染性疾病的痊愈。
- 根据患肌理论浮针不可能对感染有帮助。
- 浮针不能替代抗生素治疗感染性疾病,担心依赖浮针会延误病情。

据笔者考证基本可以排除第一种可能,而最后一种才最有可能是促成这个结论的真正原因。但无论如何,后三种原因都不足以得出“浮针并无助感染性疾病”的结论。

虽然,“浮针免疫机制”,在这里主要讨论的是“自我修复机制”,但是从理论上讲,如果“蛛网说”是成立的,那么浮针影响免疫系统不应当仅仅影响的是修复再生机制,而对于机体抗感染机制也应该有影响的可能,因为疏松结缔组织内的职业免疫细胞巨噬细胞、白细胞等都在抗感染中扮演重要角色。况且,“抗感染”本来就是免疫系统的重要功能之一。因此,浮针是否影响“抗感染机制”,是“浮针蛛网说”所面对的最大挑战,也是无法绕过的课题。事实上,传统毫针有效治疗诸如痢疾(邱茂良,1979;卢振初,1984)、疟疾(孙国杰,2000)等感染性疾病的研究,已经有了大量报道和肯定的结论。因此,

笔者认为无论是为了确立感染性疾病的禁忌症地位,还是为了扩大浮针的适应症范围,对这一课题做出严密的临床和实验研究都是十分必要的。

6. 结语

近年来,浮针的研究有了长足的进步,但是多集中于临床观察,而有关作用机制的理论性研究还相对滞后,在实验研究等基础研究领域则乏善可陈,这无疑严重制约了浮针应有的发展步伐。本文通过“蛛网现象”来描述浮针影响机体免疫系统和促进组织修复再生的过程,并从现有的基础医学理论和浮针的临床现象两个方面来进一步论证了这一机制成立的可能性,同时指出这一理论可能为浮针临床实践带来的启示和指导意义。但是,应该指出,浮针的“蛛网机制”只是一种建立在理论层面上的推论和假说,还需要大量的研究工作尤其基础研究和实验研究的验证,即使观点是正确的,要走的路也还很长。

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The Journal of Chinese Medicine and Acupuncture 《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, 每年发行两期, 并可在学会网上阅览。本会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会到中医之奇妙果效, 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。下期刊稿截至日期为 2020 年 9 月 10 日

对“得气”和“气至”概念的拨乱反正

Corrections for the concepts: De Qi/getting Qi and Qi Zhi/Qi arrival

韩永刚

Yonggang HAN

Chelsea Natural Health Clinic, 208 Fulham Rd, Kensington, London UK SW10 9PJ

摘要：回归经典，正本清源。针感是患者在针刺过程中酸麻胀痛的主观感受；“气至”和“得气”是医生通过望诊、脉诊、触诊获得的客观体征；“气至”是指针刺前后医生诊查到的脉象的变化，即“补则实、泻则虚”的“谷气至”；“得气”是指刺中气穴，从而“针与经气相得”；欲“得气”，需要强调“候气”和“揣穴”；“得气”反应包括针下的沉涩紧、跳动感，针体的颤动、摇摆，以及“针下热”、“针下寒”在内的多种气化反应；不“得气”，当“催气”，力求“气至病所”；“用针之类，在于调气”；“凡刺之道，气调而止”，毫针调气法是中医上工所掌握的最高明的治疗技术。

关键词：针感；得气；气至；谷气；候气；揣穴；催气。

一、“针感”不等同于“得气”和“气至”。

《简明中医辞典》对“得气”的解释：“得气是针刺进针后使针刺部位产生经气感应的手法，又称为针感”^[1]。“十一五”国家规划教材《刺灸学》认为：“得气又可称为气至，现代又称针感或针刺感应”^[2,3]。《刺灸法医学》也持相同观点，是指针刺穴位后，患者针刺部位出现酸麻胀痛的感觉”^[4]。在以上定义中，“针感”、“得气”和“气至”是一样的，都属于患者的主观感受，与医生无关。患者的主观的针感有酸、麻、胀、重、凉、热、触电感、跳跃感、虫爬蚁走感等等。这些感觉的性质与针刺部位密切相关。例如针刺到肌肉、肌腱、关节、骨膜等部位则产生酸、胀、沉重等感觉；针刺到神经附近则产生麻感；针刺到神经干则发生触电感；针刺到毛囊、血管及四肢末端敏感部位则多出现痛感等等^[3]。目前国内外关于得气的量化评价也主要侧重于患者的主观感受，“针刺主观感受量表”

(Subjective acupuncture sensation scale, SASS)是目前得气的主要量化方法，很少有评价医师手下、针下的得气量表^[5]。

实际上，患者主观的“针感”与中医经典中的“得气”、“气至”并不一样，也就是说现代把“针感”等同于“得气”、“气至”，是曲解了古圣先贤的本意。这很可能源于清末（1839-1912）江上外史撰《针灸内篇》，凌氏传人在记述凌云的学术观点时曰：“凡针入穴，宜渐次从容而进，攻病者，知酸知麻

知痛，或似酸似麻似痛之不可忍者即止”。民国时期著名针灸学家承淡安《中国针灸治疗学》言：“医家运针，必待气至，病者觉针下酸重，医者捻动针柄亦觉针下沉紧之象是也”；“凡针下若气不至，用指于所属部分、经络上下左右循之，使血气往来上下均匀，针下气者沉紧，得气即泻之故也”^[6]。但是把针感等同于“得气”、“气至”，则无法解释无需得气的针法，例如激光针、腕踝针、皮内针、嵌针、浮针、腹针、耳针、头针等，患者主观上没有出现明显的针感，却仍然有良好的疗效，用“隐性得气”、“阈下刺激”的假说也很难说得通。实际上在中医经典中，“得气”、“气至”是医生在治疗过程中诊查到的气的客观变化，与患者的酸麻胀痛的主观感受无关。

经典中医以气一元论的三分法为哲学基础，气是构成宇宙万物的本原，气的运动是物质世界存在的基本形式^[7]。中医理论认为所有的疾病都与气相关，故《黄帝内经·素问·举痛论》曰：“余知百病生于气也”。在针灸治疗中，“得气”和“气至”的核心都是“炁”，用现代语言来说气是能量和信息，是以场、波等形式存在的能量，大到宇宙，小到人体，气的运动变化就是能量的不同存在形式。同时，中医有着“象思维”的特点。气的运动变化可以通过各种“象”来观察到，天地之间气的变化可以通过气候、物候等“象”来观察到，人之气则可以通过“象”借助视觉、触觉等感官来观察到。中医医

生就是通过望诊、脉诊、触诊来观察患者的各种“象”，面象、脉象、针象，从而诊查患者气的变化。

二、“气至”是指针刺前后医生诊查到的脉象的变化，即“补则实、泻则虚”的“谷气至”。

“气至”一词出现在《黄帝内经》中的多个篇章，但是明确指出何谓“气至”，则是在《黄帝内经·灵枢·终始》曰：“所谓气至而有效者，泻则益虚，虚者，脉大如其故而不坚也；坚如其故者，适虽言故，病未去也。补则益实，实者，脉大如其故而益坚也；夫如其故而不坚者，适虽言快，病未去也。故补则实、泻则虚，痛虽不随针，病必衰去。”在这一篇，“气至”有明确的内涵：针灸前脉象太过而实，通过针灸的泻法，脉象就虚了，这就是气至；针灸前脉象不及而虚，通过针灸的补法，脉象就实了，这就是气至。简单来讲，《黄帝内经》对“气至”的定义就是脉象的变化，也就是通过针灸的补泻，虚则补之，实则泻之，使原来的实脉（有力）变虚（力量减弱），原来的虚脉（无力）变实（力量增强），达到“六脉若一”的正常状态^[7]。脉象的改变显示人体气的变化，气的运动恢复正常，则人体的功能恢复正常，症状也得以减轻，疾病向愈，即所谓“痛虽不随针，病必衰去”。

脉是人体气的窗口，故《黄帝内经·灵枢·经脉》曰：“经脉者常不可见也，其虚实也，以气口知之”。针灸前后患者脉象的客观变化，是医生通过脉诊检查、比较之后发现的。《黄帝内经·灵枢·九针十二原》曰：“凡将用针，必先诊脉，视气之剧易，乃可以治也。”提示在针灸治疗之前需要诊脉。针灸之前诊脉是为了明确诊断，知道“气之剧易”，也就是脏腑经络气之虚实，然后可以据此来补泻。《黄帝内经·灵枢·小针解》曰：“所谓虚则实之者，气口虚而当补之也。满则泄之者，气口盛而当泻之也”。“气口”就是“脉口”，也就是寸口脉，根据脉诊得出的虚实来做相应的补泻，虚则补之，实则泻之。而补泻之后，脉象就会发生相应变化。故《黄帝内经·灵枢·小针解》曰：“为虚为实，若得若失者，言补者必然若有得也，泻则恍然若有失也”。施用补法后，病人的脉象变强，如同有所收获；施用泻法后，病人的脉象变弱，如同有所损失。《难经·七十九难》也明确指出虚实、得失是脉象的客观变化，而不是患者的主观感觉：“所谓实之与虚者，牢濡之意也，气来实者为得，濡虚者为

失，故曰若得若失也。”脉象变实，如同有所得；脉象变虚，如同有所失。

另外，医生需要诊脉来判断正气和邪气之盛衰。《黄帝内经·灵枢·终始》曰：“邪气来也紧而疾，谷气来也徐而和。”邪气亢盛，则正邪交争剧烈，则脉象急数，并且有紧张感，所谓“邪气来也紧而疾”；如果正气充盛，没有邪气的侵扰，则脉象不快不慢，如闲庭散步，此所谓“谷气来也徐而和”。

《黄帝内经·灵枢·终始》曰：“凡刺之道，气调而止”。《黄帝内经·灵枢·九针十二原》曰：“刺之而气不至，无问其数。刺之而气至，乃去之，勿复针”。指出没有“气至”，需要继续治疗直至“气至”；“气至”之后则可以停止治疗。而判断是否“气至”，还是根据脉象。针灸之后再次诊脉是为了确认疗效。再次诊脉，医生发现患者的脉象发生了“虚而实之，实而虚之”的变化，即“补则实、泻则虚”的变化，这就是“气至”，从而验证医生的治疗有效，患者的病情一定是向好的方向变化，这就是《终始》篇所谓“痛虽不随针，病必衰去”。相反，如果患者的症状虽然减轻，但是医生诊查脉象并没有发现明确的“虚而实之，实而虚之”的变化，说明治疗并没有对患者产生根本性的效果，即时效应的症状改善就只能是暂时性的，这就是《终始》篇所谓的“坚如其故者，适虽言快，病未去也”，“夫如其故而不坚者，适虽言快，病未去也”。综上所述，判断“气至”与否的标准是以针刺前后医生所观察到的脉象的变化作为依据。《黄帝内经·灵枢·终始》曰：“故一刺则阳邪出，再刺则阴邪出，三刺则谷气至，谷气至而止。所谓谷气至者，已补而实，已泻而虚，故以知谷气至也”。经过针刺补泻，患者的脉象发生了“虚而实之，实而虚之”的变化，“气至”就是医生通过诊查针刺前后患者脉象的变化而体察到的“谷气至”。

同时，“气至”即针刺前后脉象的变化是针刺疗效的客观指标^[8,9]。《灵枢·九针十二原》曰：“刺之要，气至而有效。效之信，若风之吹云，明乎若见苍天，刺之道毕矣！”医生只要明确诊查到这一客观指标，临床疗效一定是立竿见影，效如桴鼓。

三、“得气”是指刺中“气穴”，“针与经气相得”，是医生通过望诊和触诊观察到的客观变化。

1. 欲“得气”，先“候气”，等待最好的针刺时机。

《黄帝内经·灵枢·小针解》曰：“要与之期者，知气之可取之时也。”针灸不是一上来就扎针，既不能盲目进针，又不能坐失良机。《黄帝内经·灵枢·刺节真邪论》曰：“用针者必察其经脉之虚实，切而循之，按而弹之，视其动应者乃后取之。”《灵枢·卫气》亦曰：“取此者，用毫针，必先按而在久，应于手，乃刺而予之”。通过望诊和触诊发现了气的运动之后才开始针刺，这就是所谓的“视其动应者”、“应于手”的“候气”过程。那么为什么要“候气”呢？《黄帝内经·素问·离合真邪论》曰：“候气奈何？岐伯曰：夫邪去络入于经也，舍于血脉之中，其寒温未相得，如涌波之起也。时来时去，故不常在”。气的运行如同潮起潮落，有高潮和低谷，不是一直都表现的很明显，这就需要医生耐心等待和仔细观察，等待最好的针刺时机，此所谓“候气”。《难经·七十八难》曰：“知为针者，信其左；不知为针者，信其右。当刺之时，先以左手压按所针荥俞之处，弹而努之，爪而下之，其气之来，如动脉之状，顺针而刺之。”扁鹊强调，在针刺操作中押手的作用比刺手更加重要。通过押手的揣穴和候气，发现类似脉搏一样的气的运动，然后才予以针刺。后世的针灸大家也都强调押手候气的重要性。例如金元针灸大家窦汉卿《针经指南·标幽赋》指出：“左手重而多按，欲令气散；右手轻而徐入，不痛之因”左手是押手，主候气；右手是刺手，主进针。元代王国瑞《扁鹊神应针灸玉龙经·注解标幽赋》曰：“指弹其穴，穴下气轻滑慢，气未至也，勿刺。待气至，方可刺也。”并做出了具体形容“气至穴下，若鱼吞钩，若蚁奔走，或浮或沉也。穴下气不至，若虚堂无人，刺之无功，不可刺也”。明代杨继洲《针灸大成·卷六》：“用针之法，以候气为先。须左指闭其穴门，心无内慕，如待贵人，伏如横弩，起若发机”。明代汪机《针灸问对》云：“谓当刺时，先以左手压、按、弹、怒、爪、切，使气来如动脉应指，然后以右手持针刺之。”从理论上讲，如果能够结合子午流注、循经按时开穴法，临床效果应该能够事半功倍。

2. “得气”首先要刺中“气穴”，而非肉节，强调和重视“揣穴”。

《黄帝内经·灵枢·四时气》曰：“四时之气，各有所在，灸刺之道，得气穴为定”。《黄帝内经·灵枢·邪气藏府病形》曰：“黄帝曰：刺之有道乎？岐伯答曰：刺此者，必中气穴，无中肉节。中气穴则针游于巷，中肉节即皮肤痛”。指出针刺的一个重要的技术环节就是不能引起患者皮肤痛的反应，

因为那样只是标志着针刺在了肉节上，而不是气穴上，从而引起患者疼痛感，而这是错误的。《灵枢·胀论》亦云：“不中气穴，则气内闭；针不陷育，则气不行；上越中肉，则卫气相乱，阴阳相逐”。说明没有刺中气穴，反而刺中了肉节，会引起气机逆乱，属于临床误治。如果准确地刺中了气穴，进而得气，则会出现针刺的巡经感传现象或者患者会出现气机在人体循行的气化反应，此所谓“中气穴则针游于巷”。可见，“中气穴”是“得气”的先决条件。无痛进针法是针灸师应该掌握的最基本的操作技术。

为了精准地刺中“气穴”，临床上必须重视“揣穴”，故《黄帝内经·灵枢·经水》曰：“审、切、循、扪、按，视其寒温盛衰而调之，是谓因适而为之真也”。“揣穴”的相关内容散见于《黄帝内经》多个篇章。例如，《灵枢·五邪》曰：“取之膺中外出，背三节五藏之傍，以手疾按之，快然，乃刺之。”《灵枢·癰狂病》曰：“咳而动手者，与背输，以手按之，立快者是也。”《灵枢·杂病》曰：“心痛，当九节刺之，按，已刺按之，立已；不已，上下求之，得之立已。”针灸高手往往强调“穴位是活的”，教科书上穴位的位置只是理论上的位置，具体到某一个患者，会有差异性。因此，要用押手在理论上穴位的上下左右仔细地揣穴，以手按之，往往能缓解患者的痛苦，此所谓“快然”和“立快”，这才是真正的穴位。再针刺真正的穴位，效果往往立竿见影，此所谓“立已”。

3. “得气”是气至针下，从而“针与经气相得”，最典型的“得气”反应是通过医生的触诊观察到的“沉涩紧”和“跳动感”。

宋代针灸名医窦汉卿《针经指南·标幽赋》，对“得气”时医生手下的感觉作了形象的描述：“轻滑慢而未来，沉涩紧而已至。既至也，量寒热而留疾；未至也，据虚实而候气。气之至也，如鱼吞钩饵之沉浮；气未至也，如闲处幽堂之深邃”。明代张景岳《类经》曰：“若气不潮针，则轻滑不知疼痛，如插豆腐，未可刺也。必候神气既至，针下紧涩，便可据法施用。入针后轻浮虚滑迟慢，如闲居静室、寂然无闻者，乃气之未到；入针后沉重涩滞紧实，如鱼吞钩、或沉或浮而动者，乃气之已来。”杨继洲《针灸大成》亦云：“若气不朝，其针轻、滑不知疼痛，如插豆腐；如神气至，针自紧涩”。没有“得气”的表现“轻滑慢而未来”、“如插豆

腐”、“似闲处幽堂之深邃”，即医生的刺手和押手感觉轻松、虚滑，如同没有对手一样无处发力，又犹如身在幽暗空旷的殿堂，深邃宁静。而“得气”的表现“沉涩紧”、“针自紧涩”、“如鱼吞钩饵之沉浮”，即医生的刺手和押手感觉沉重、干涩、紧实，或者感到跳动或蠕动，又或者如同钓鱼时鱼儿吞钩饵、一沉一浮。

需要指出的是，这种“沉涩紧”的触诊感觉要与因手法不当引起疼痛而造成局部肌肉痉挛或滞针严格区别开。陆飏医生认为扎跳就是“得气”，影响最大的莫过于王岱的“跳动穴”学说。王氏称针刺某些穴位可引起肢体跳动或穴位处的肌肉抽动，认为此种跳动现象是针刺得气的重要标志，其所用穴位有尺泽、环跳、殷门、曲池、三阴交、阳陵泉、光明等。王淑娟也提出跳动得气的概念，并指出这些穴位多在肌肉丰厚处，位于两块肌肉之间，且越靠近肌腹越易产生跳动即位于肌腹上，这些论述和触发点理论接近^[10]。

4. “得气”的另一类反应是通过医生的望诊观察到的“针象”，即针体的颤动、摇摆等。

《难经·七十八难》曰：“当刺之时，必先以左手厌按所针荣俞之处，弹而努之，爪而下之，其气之来，如动脉之状，顺针而刺之”。通过押手的操作，医生体察到“气至手下”，然后针刺，就很容易“得气”。而“得气”之后另外的一大类反应是针灸针出现节律性或者非节律性的颤动和摇摆。针体摆动与脉搏相一致者，多为受到了附近动脉的影响，这就是所谓的“其气之来，如动脉之状”；非节律的震颤者则多为肌肉痉挛或抽搐而引起。

5. “得气”之后需要“守气”。

“守气”就是守住已得之气。《黄帝内经·素问·宝命全形论》曰：“刺虚者须其实，刺实者须其虚，经气已至，慎守勿失”。就是说即使在针刺“得气”后，医生也要小心谨慎，免得失去已经得到的气。《黄帝内经·素问·针解》进一步做了解释：“经气已至，慎守勿失者，勿变更也”。“勿变更也”就是“得气”后就不要做更多的手法，免得画蛇添足，适得其反。另外，《黄帝内经·灵枢·终始》曰：“男内女外，坚拒勿出，谨守勿内，是谓得气”。就是根据性别不同，男性宜深留针，在地部；女性宜浅留针，在天部。《太素》注曰：“针下得男内气，坚拒勿令出也；得女外气，谨守勿入内也。”在“得气”后需要保持这个状态，“坚拒勿出”就是不要

向外拔针，“谨守勿内”就是不要向内进行针，提示不做画蛇添足的手法，这样来保持“得气”的状态。

6. 不“得气”需要“催气”。

《黄帝内经·灵枢·终始》篇要求针刺留针首先要遵循“男内女外”的原则，也就是男子留针于地部，守营气；女子留针于人部，守卫气。皆因男属阳，女属阴；阳气入内，阴气出外，内外交通从而阴阳协调。清代张志聪注曰：“男为阳，女为阴。阳在外，故使之内；阴在内，故引之外，调和调外内阴阳之气也。坚拒其正气而勿使之出，谨守其邪气而勿使之入，是谓得气。”通过“男内女外”的针刺手法和留针守气，阳气入内，阴气出外，这样阴阳沟通而协调，阴阳交融。这也符合的经典中医针灸的根本精神，故《素问·阴阳应象大论》曰：“故善用针者，从阴引阳，从阳引阴”。

通过触诊和望诊的观察，如果没有以上所述“得气”的种种表现，这时就需要“催气”。首选方法是留针深浅层次的转换，正如同《难经·七十八难》所曰：“不得气，乃与男外女内”。不“得气”，就要把针从“男内女外”变为“男外女内”，也就是转变为男子留针于天部，守卫气；女子留针于地，守营气。元代滑伯仁注解：“若停针候气，久而不至，乃与男子则浅其针而候之卫气之分，女子则深其针而候之荣气之分。”针刺后浅部不得气，宜催气插针至深部；深部不得气，宜催气提针至浅部。留针深浅层次的转换，可以进一步引申为通过提插法来催气，也就是“天部-人部-地部”三部提插法，在此不再赘述。

《黄帝内经·素问·刺要论》曰：“病有浮沉，刺有浅深，各至其理，无过其道；过之则内伤，不及则生外壅，壅则邪从之。浅深不得，反为大贼，内动五脏后生大病。故曰：病有在毫毛腠理者，有在皮肤者，有在肌肉者，有在脉者，有在筋者，有在骨者，有在髓者”。邪深刺浅，不能中病；邪浅刺深，则反引邪深入，加重病情。根据疾病所在的层次，要特别注意针刺的深浅，严格来讲，要根据中医的“五体论”，即区分“皮、肉、脉、筋、骨”不同层次而针刺，力求做到“在骨守骨，在筋守筋。”这是经典中医内涵中的精准针灸。

如果不详细地区分“五体”，也可以简单粗略地划分为浅深两层来针刺，即浅刺卫气，深刺营气。《黄帝内经·灵枢·终始》曰：“脉实者深刺之，以泄

其气；脉虚者，浅刺之，使精气无写出，以养其脉，独出其邪气……阴也，深刺之。病在上者，阳也。病在下者，阴也。痒者，阳也，浅刺之。”《难经·七十六难》亦云：“当补之时，从卫取气；当泻之时，从荣置气”。病位浅，则在天部行针，即激发卫气，以捻转、震颤、循摄、爪切为主；病位深，则在地部行针，即激发营气，以提插法为主，而有效的提插法必须通过中层筋膜。

“催气”之后最佳的反应就是“气至病所”。《三国志·华佗传》记载“下针，言当引某许，若至，语人，患者言，已到，后便拔针，病亦行差”，就是对“气至病所”的生动描述。最简单的使“气至病所”的“催气”方法就是“针尖指向法”，即用平刺法或斜刺法，将针尖指向患处。汪机《针灸问对》曰：“得气，便卧倒针，候气前行，催气运至于病所”。杨继洲《针灸大成》曰：“转针向上气自上，转针向下气自下”。

“催气”的方法在后世做了极大的丰富和补充，演变为提插、捻转、震颤、循摄、爪切等等多种方法。杨继洲《针灸大成》曰：“凡下针，若气不至，用指子所属部分经络之路，上下左右循之，使气血往来，上下均匀，针下自然气至”。徐凤《金针赋》又提出了使针下之气通关过节，直达病所的飞经走气四法“若关节阻涩，气不过者，以龙虎龟凤通经接气。”“龙虎龟凤”即青龙摆尾、白虎摇头、苍龟探穴、赤凤迎源。张建强将常用针刺调气的手法总结为：循摄调气法、针向调气法、弹指调气法、按压调气法、运气调气法、推捻调气法、逼针调气法、捣针调气法、通关节法、搓针调气法、添针调气法等十一种方法^[11]。袁宜勤将常用针刺调气的手法总结为：循摄调气法、弹针调气法、针向调气法、按压调气法、押手按压法、推捻调气法、运气调气法、逼针调气法、捣针调气法、通关节法、添针调气法、局部扩散法、搓针调气法等等十二种方法^[12]。

7. “催气”之后仍然不能“得气”，需要考虑转换为艾灸、中药等其它治疗方法。

《难经·七十八难》曰：“不得气，乃与男外女内。不得气，是为十死不治也”。明代李梴《医学入门》曰：“针下轻浮虚活者，用弹、努、扞、循、引之；气犹不至，如插豆腐者死”。经过催气，仍然不能得气，说明患者正气极度虚弱，很难通过针刺的方法来激发，这时候应该考虑用艾灸、中药等其

它治疗方法来代替针刺。因为从补虚泻实的角度考虑，针刺虽然既可以补虚又可以泻实，但是其仍然以泻实为自身优势；而艾灸、中药的补益正气的效果天然要优于针刺法。

四、在“气至”、“得气”基础上出现的进一步的气化反应

1. “针下热”、“针下寒”的气化反应，就是后世所说的“烧山火”、“透天凉”。

《黄帝内经·素问·针解》曰：“刺虚则实之者，针下热也，气实乃热也。满而泄之者，针下寒也，气虚乃寒也……刺实须其虚者，留针阴气降至，乃去针也。刺虚须其实者，阳气降至，针下热乃去针也”。患者脉象属实，即有力，或者病位所在经络、穴位属实，即张力过大，通过针刺泻实的方法，“刺实须其虚者”，留针一段时间等到“阴气降至”，患者往往会出现“针下寒”的气化反应，呈局部性或者全身性，这就是后世所谓的“透天凉”。

患者脉象属虚，即无力，或者病位所在经络、穴位属虚，即张力不足，通过针刺补虚的方法，“刺虚须其实者”，留针一段时间等到“阳气降至”，患者往往会出现“针下热”的气化反应，呈局部性或者全身性，这就是后世所谓的“烧山火”。

无论是“烧山火”还是“透天凉”，都是通过针刺补泻，虚则实之，实则虚之，从而“谷气至”，即正气复、气机调的状态，也就是《黄帝内经·灵枢·终始》所述：“所谓谷气至者，已补而实，已泻而虚，故以知谷气至也”。

2. 其它的气化反应

(1) 放松感乃至疲倦感：患者在行针过程中入睡，自然醒来后觉得神清气爽；如果过早结束治疗，患者往往仍然感觉疲乏、困倦。

(2) 精神情绪类：患者的不良情绪得到释放，因而出现哭泣，或者直接表现为如释重负、轻松愉快感。

(3) 轻盈漂浮感和沉重下坠感。

(4) 皮表经络现象：循经出现红线、白线、丘疹带等。

(5) 气流感：呈局部性“气至病所”；或者呈全身性的气机流动感。需要指出的是，全身性的气流感，其循行方向往往并不是按照十二正经的流注次序，而是按照《黄帝内经·灵枢·逆顺肥瘦》“手之三阴，从藏走手；手之三阳，从手走头；足之三阳，从头走足；足之三阴，从足走腹。”并且，往往呈左右交叉八字型循行。具体细节可以参考潘晓川老

师《针灵》一书^[7]。

(6) 内视现象：患者看到不同颜色的光或者能看到气的运行，类似于中医的经络循行和道家的“小周天”、“大周天”等等。

五、总结

将患者的酸麻胀痛的主观感受作为评判“得气”和“气至”的标准，是近现代针灸在理论和实践上的巨大错误，需要拨乱反正！而拨乱反正就需要回归经典，正本清源，发掘中医经典中蕴藏的真谛！

《黄帝内经》总结针刺的核心就是调整患者气机，是通过“调气”而达到“气调”。调气包括候气、守气、催气等手段，核心目的就是为了“得气”和“气至”，最终达到“气调”的状态。故《灵枢·刺节真邪论》曰：“用针之类，在于调气”；《灵枢·终始》曰：“凡刺之道，气调而止”。《黄帝内经》极其推崇毫针调气法，通过小小的毫针来调气，是“至巧”，即最高明的治疗手段，是中医上工必须掌握的，故《灵枢·根结》曰：“上工平气，中工乱脉，下工绝气危生”；《灵枢·卫气失常》亦曰：“随变而调气，故曰上工”。根据患者气的变化来“调气”，使之“气调”、“平气”，是中医上工之绝技。

经典中医有着“象思维”的特点。中医的望闻问切四诊，首重阴阳，故《素问·阴阳应象大论》曰：

“善诊者，察色按脉，先别阴阳。”现实世界的复杂性可谓数不胜数，辨别阴阳可以通过“象”来以简驭繁，故《素问·五运行大论》曰：“夫阴阳者，数之可十，推之可百；数之可千，推之可万。天地阴阳者，不以数推，以象之谓也。”如上所述，经典中医通过脉象辨气至，针象、手下辨得气。经典中医的“得气”和“气至”，不是患者的酸麻胀痛的主观感受，而是医生通过望诊、脉诊、触诊而查到的客观体征，包括患者面象的变化，医生指下脉象的变化、刺手和押手下气的变化以及“针象”，即针体的颤动、摇摆等。通过这些客观体征，医生知道患者脏腑经络之气的变化，在治疗前明确诊断，补虚泻实，有的放矢；在治疗后可以确认疗效，验证治疗的有效性。

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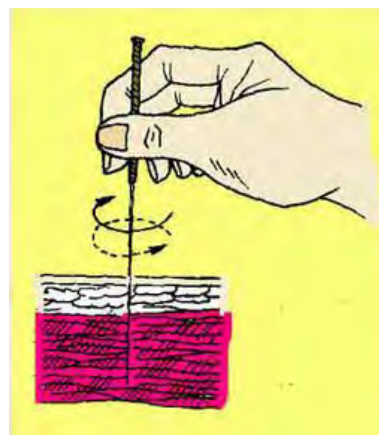
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作者简介：韩永刚，男，中医博士，2008年毕业于中国中医科学院临床医学基础研究所，师从中国工程院王永炎院士和原北京中医药大学校长高思华教授。2009年赴英国工作至今。经典中医自洽体系学术传承人。Email:yonggang01@hotmail.com



从临床表现浅论针感七境界

吴平

23 Heath Road, Twickenham, London, TW1 4AW

摘要：由针刺临床的实际情况总结出有关针感的现象，首先提出针感的七层境界，讨论针刺针感和得气的概念，性质，表现，临床应用和目前的研究现状，提出未来的研究方向和可能。

关键词：针刺，针感，得气，治神，针感七境界说

A Brief Discussion about Seven Levels of Needling Sensation Based on the Clinical Manifestations

Ping Wu

Abstract:

Patients' needling sensations based on real cases of clinical acupuncture were summarised. Seven -level of needle sensation was first established. Concepts, quality, demonstration, clinical practice and current research of needle sensation and De Qi were discussed, leading to the direction and possibilities of future research.

Key words:

Acupuncture, needle sensation, De Qi, Shen, seven-level of needle sensation

针灸临床治疗，离不开针刺针感以及得气，针感得气与针刺疗效密切相关。但是针感不等于得气，其概念或表现两者有重叠，故在临床上常常有混淆。针感：针感分患者对针刺治疗的主观感受(包括生理心理和精神方面)和施术者的主观感觉(术者手下和身体生理感觉以及精神心理)。上面的是作者对针感的个人理解。针感的教科书定义：(1)邱氏《针灸学》

上海科学技术出版社(1985)“得气亦称针感，是指将针刺入腧穴后所产生的经气感应”“当这种经气感应产生时，医者会感到针下有徐和或沉紧的感觉；同时患者也会在针下出现相应的痠，麻，胀，重等甚或沿着一定的部位，向一定的方向扩散传导的感觉”。

《黄帝内经》首次提出了“得气”的概念，《素问·离合真邪论》“吸则内针，无令邪忤。静以久留，无令气布，吸则转针，以得气为故”。

窦汉卿《标幽赋》：“轻滑慢而未来，沉涩紧而已致…气之至也，如鱼吞钩饵之浮沉；气未至也，如闲处幽堂之深邃”。

全国高等中医药教材《刺灸法》“得气，古称气至，近称针感，是指毫针刺入一定深度后，施以提插或捻转等行针手法，使针刺部位获得经气的感应”。

针灸的疗效好坏与得气与否总的来说还是呈正相关，尽管现在有部分医生临床经验以及有些研究表明也有患者无得气感但疗效仍不错。目前为止国际学术界普遍认可的针刺针感如下：痠/酸，麻，胀，痛，跳，触电样，…(2)陆氏(3)认为：

针刺过程中毫针与经气相得，即毫针进针后施以一定的手法，使针刺腧穴部位产生针刺感应，这种针刺感应就是得气。对得气提出两种明确的指征：自觉指征和他觉指征。分别代表受术者的主观感觉和反应，主要表现为痠麻胀痛等；以及施术者的主观感觉和观察到的现象，包括针下沉紧，穴旁肌肉紧张甚至跳动等。本文作者认为：针感分患者对针刺的主观感觉和客观反应(包括生理心理和精神)和施术者的主观感觉和心理感受。窦汉卿《标幽赋》“轻滑慢而未来，沉涩紧而已至…气之至也，如鱼吞钩饵之浮沉；气未至也，如闲处幽堂之深邃”。一般来说针刺的疗效高低与得气与否呈正相关，但是现在亦有资料(4)表明，患者无得气之感觉亦有临床疗效。

二：目前为止，国际学术界普遍认可的针感类型。

“第一种：痠/酸，麻，胀，痛(5)。

第二种：肌肉跳动，触电样感觉(6)。

第三种：水波感，冷热感(7)。

现代针灸学家朱链首次使用针感一词(8)，认为针感包括自觉针感和他觉针感，认为自觉针感即为受术者针刺部位产生的痠麻胀痛等感觉。他觉针感即是施术者手有沉，紧，涩等反应。临床上可以出现单一的针感，也可出现混合的针感。

三：学术界对得气，针感的研究现状

赖氏(9)认为：得气从广义上应包括三类。

第一类叫“针响”，患者主观的感觉包括“针下寒，针下热”“痠麻胀痛重”等。

第二类叫“医者得气”，是指医者针下的沉，紧，涩的感觉。

第三类是真正意义上的“得气”，是高级的得气，“治神”。

关于此观点，本文作者认为，“针刺治神”，只有针刺反应涉及到患者的精神心理层面才能算达到“针刺治神”。

四：针感的七个境界

从患者自身的主观感觉：

第一层：痛。仅仅只是针刺入的痛感（锐痛），有时候是医者希望出现的针感，比如针刺人中，十宣等，藉此痛感起治疗作用。

第二层：痠／酸，麻，胀。

第三层：患者体内局部的经气运行感觉。

第四层：患者自觉体内全身的经气运行。

第五层：患者自感身体超重／超轻，身体局部或全身变冷变热感，自觉冷气或热气进入体内外，气味的变化，或者感觉身体的虚无感。

第六层：患者自觉可见各种颜色的能量色彩环绕成为或在体内运行。

第七层：患者自觉灵魂出窍(10)。

五：层次划分的意义

第一层：表示气在有问题的经络中“不通则痛”（除了特殊情况下医者特意要求的痛感如刺人中十宣等）

第二层：表示经气开始试图流通

第三层：表示经气在原本不通的经络中开始旺盛起来。

第四，五层，全身一气周流，进行补虚泄实的自我调整。

第六，七层：调神。

第一到第三层，精的层次，“练精化气”。

第四，五层，气的层次，“练气化神”。

第六，七层，神的层次，“练神还虚”，针刺调神。

五：不同层次的针感与治疗效果

第一层：痛感。

在特定条件下，医者利用这个痛感（强刺激）来治疗比如休克患者的急救。在大部分情况下，痛感是最低层次的针感，由于施术者技术水平低不熟练所致，是患者不欢迎的针感。

第二层：酸麻胀。

有一定的治疗效果，是大部分施术者在临床上表现出来的针感，也是临床教科书上的经典针感表现。

第三层：患者身体局部的经气运行之感。

这个针感的治疗效果比之前两层更进一步，一般局限在一个关节之内，有些水平稍高的施术者或者患者比较敏感，经气的运动可以突破一个关节，距离比较长。

第四层：患者自觉体内全身的经气运行。

这是中高级的水平，对于全身性疾病以及内脏功能的问题有很好的效果。

第五层：更加高级的水平，对全身性的疾病和内脏疾病有进一步的作用。

第六，第七层：除了可以治疗全身性的疾病和治疗内脏内分泌疾病外，对精神心理疾病有很好的作用。

六：产生和影响不同层次的针感的因素

首先针灸医生需要熟练掌握经络穴位和针刺技术，作为针灸大夫，最好练习相关传统武术和气功功法，如少林易筋经，太极拳八卦掌之类，以增强医生的精神意志力。行针时平心静气，“精神内守，手若握虎”。要求患者安静放松，试着停止思考，静心体会身体的感受。

七：临床相关资料(见后附件)

首先这些针感均是患者治疗期间或之后告知医生的自我主观感受，随机的临床患者，没有事先的告知。有些患者初次针刺即有以上针感，或一种或多种综合。有些患者几次治疗后出现针感。男女老少均有，女性多见。

八：未来的相关研究展望

可在进一步收集临床资料的过程中开展相关研究，可与相关部门合作应用现代的检测技术以及相关专业技术人员合作。这些针刺留针期间患者自觉的身体感觉都是患者随机出现的各种针感，目前也没条件去做符合现代科研设计的研究，希望有关医疗机构如果有兴趣可以作进一步的研究，比如结合iMRI之类。

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The Clinical Applications of Four Gates

Yang Xiang

Introduction

The combination of Hegu LI-4 and Taichong LV-3 is called as four gates. The four gates point is a very important combination in acupuncture's practice. I am quite sure different acupuncturists may have different idea and experience with the four gates' point. I am hoping my talk would help you to understand the four gate's points further both theoretically and practically.

Hegu LI-4

LI-4 is a Yuan-source point of Large Intestine Channel, Ma Dan-yang Heavenly Star point. LI-4 is on the dorsum of the hand, between the first and second metacarpal bones, at the midpoint of the second metacarpal bone and close to its radial borders. When you need needling this point, ask the patient to squeeze the thumb against the base of the index finger, and locate LI4 at the highest point of the bulge of the muscle and approximately level with the end of the crease. Needling technique: perpendicular insertion 0.5 to 1 cun; oblique insertion directed proximally 1 to 1.5 cun; horizontal insertion 2 to 3 cun towards Laogong P-8, or Qianggu SI2 or Houxi SI 3 (thumb at a angle of 90 degree with palm).

Actions:

Unblock Channels to alleviate pain (tongjing zhitong);
Expel wind and cleansing heat both from exterior and interior (shufeng/xifeng qingre);
Soothing liver to calm mind and to ease off pressure (shugan jieyu);
Cooling blood to relieve itchiness (liangxue zhiyang);
Ease muscular spasm (huanji jiejing);
Restore the Yang Qi (huiyang);

Indications:

Local effect: pain in fingers, hand, wrist, elbow, arm and shoulder; finger's stiffness or spasm; contraction of the fingers;
Distance effect:
ENT: blurred vision (GB-20 could be a better option), eye infection or inflammation, nose bleeding, sinusitis, running nose, teeth ache, gum infection or inflammation, lockjaw, loss of voice, sore throat, tonsillitis, face swelling or oedema, facial muscle spasm;
Digestive: stomach pain or spasm, gastritis, IBS;
Infectious: dysenteric disorder, cold, influenza, malaria;
Dermatological: acne, urticaria, dermatitis, eczema, scleroderma;
Gynaecological: amenorrhoea, prolonged labour, retention of dead foetus;

CNS and mental disorder: stroke, shock, bell pals, epilepsy, hypertension, reflex cough; addictions (stop smoking, or drug withdrawal), anxiety, stress, depression, mania;

Taichong LV-3

Taichong LV-3 is the Shu-Stream, Yuan-source and Earth point of the Liver channel, also Ma Danyang Heavenly Star point. It locates on the dorsum of the foot, in the hollow distal to the junction of the first and second metatarsal bones. Run a finger from Xingjian LV2 along the interspace between the first and second metatarsal bones towards the ankle, into the pronounced depression before the junction of the base of the first and second metatarsals. Needling technique is in the direction of Youngquan KD1, 0.5 to 1.5 cun.

Actions:

Unblock Channels to alleviate pain (tongjing zhitong);
Extinguish interior wind (xifeng);
Soothing liver to harmonise blood and Qi (shugan hexue);
Calm down uprising Qi (jiangni);

Indications:

Local effect: pain, stiffness, numbness, cold/hot/warm sensation, pins and needles, swelling or oedema in groin, leg, ankle, feet and toes; flaccidity and weakness of the legs, inability to walk;
Distance effect:
CNS and psychological: headache, migraine, insomnia, stroke, shock, epilepsy and hypertension; anxiety, stress, depression, mania, Schizophrenia;
ENT: blurred vision, eye infection or inflammation, nose bleeding, lockjaw;
Digestive: jaundice, hepatitis, vomiting, nausea, cracked lips, swelling of the lips, IBS, blood diarrhoea, distension and pain of the lateral costal region, breast pain and distension, and stomach pain or spasm, gastritis;
Infectious: common cold, influenza, mums, measles, tetany, cystitis, dysenteric disorder, malaria;
Dermatological: acne, eczema, dermatitis, urticaria, lups;
Reproductive and urinary: amenorrhoea, irregular menstruation, uterine bleeding, uterine prolapsed, ceaseless and profuse sweating after childbirth, insufficient lactation, emaciation, insufficiency of essence (low sperm count), enuresis, cystitis, difficult urination, retention of urine;

Four Gates

Hegu LI-4 is Golden in TCM five elements and Taichong LV-3 is Wood in TCM five elements. Anatomically the two points have a similar position. In cerebrum LI-4 and LV-3 have occupied a big space in the sensory and motor homunculus of cerebral hemisphere.

Actions of four gates:

Unblocking twelve channels to alleviate pain (tongjing zhitong in mandarin);

Dispelling wind and removing dampness (qufeng chushi);

Cleaning heat and easing off quivering (qingre xifeng);

Cooling blood to detoxin (liangxue jiedu);

Relieving spasm and opening gates (huanji tongguan);

Calming mind to help sleep and to relieve mental pressure (zhenjing anshen);

Waking up the brain and opening orifices (kaiqiao xingshen);

Restoring Yang Qi and recovering unconsciousness (huiyang jiuni).

TCM syndrome patterns:

Wind syndrome;

Dampness-phlegm syndrome;

Heat syndrome;

Heat or deep-hidden toxin syndrome;

Liver-wind syndrome;

Liver-Qi stagnation syndrome;

Liver blood stasis syndrome;

Liver Yin and Blood deficiency syndrome;

Blood-heat syndrome;

Yang Qi Collapse Syndrome;

Phlegm blocking orifices;

Orifices' blockage and spirit absence syndrome.

Clinical application:

CNS and psychological diseases: headache, migraine (especially at the top of head and eyeball area), M.S., M.E., stroke (both ischemia and haemorrhage, they need different approach), insomnia, epilepsy, Bell's palsy (also need local points), stress, anxiety, depression, schizophrenia*, Huntington disease, Parkinson's disease, dementia, mania;

ENT: tonsillitis, hay fever, sinusitis, gum infection, teeth ache, mouth ulcer; eye inflammation, blurred vision, eye blood vessel pathological change caused by diabetes, nose bleeding, nose bleeding during menstruation;

Digestive: gastritis, digestive ulcer, IBS, stomach spasm (ST-36 could be a better option), acute pancreatitis, gall bladder stone, Crohn disease;

Dermatological: acne, eczema, dermatitis, urticaria, psoriasis, lups, drug rash;

Gynaecological: amenstruation, irregular menstruation, uterine bleeding, infertility, poly ovary cysts;

Infectious diseases: common cold, influenza, mums, measles, tetany, cystitis, dysenteric disorder, malaria;

Action analysis:

LI-4 in TCM, it affects its own channel's disorder, which is Hand Yangming Large Intestine, also affects Foot Yangming Stomach Channel. The two channels have a physical directive connection. Other channels are affected as the following, Lung, Liver, Heart, Kidney and Spleen.

LV-3 in TCM, it affects its own channel's disorder, which is Foot Jueyin Liver, also affects Gall-Bladder Channel, because the two channels are interior-exterior channels with physical connection.

From view point of conventional medicine (this is my personal opinion): acupuncture at Hegu LI-4 and Taichong LV-3 may have a physiological response such as producing pain killer, anti-virus agent, antibiotic, anti-malaria agent, relieving muscle spasm, antihistamine, anti-inflammatory.

Why? My answer is: (1) increasing pain threshold; (2) neuron's response like nervous flex and neurotransmitter; (3) endocrine gland's response like producing hormone; (4) immune response from mast cell, white blood cell and lymph cell. Also, the LI-4 and LV-3 have taken a very large space in the sensory and motor homunculus of cerebral hemisphere, which may play a key role in the four gates' clinical effect.

In physiology, there is stimulation and there is response. My hypothesis is acupuncture at Hegu LI-4 and Taichong LV-3. The stimulation of a needle triggers all system's physiological responses, including CNS, immune and endocrine to coordinate to react to different diseases and disorders.

My viewpoint is that the target organs and/or tissues of four gates' points are muscle (blood vessel muscle, eye muscle, tongue, throat, facial muscle, upper limbs, stomach, small intestine, large intestine, uterus and testicles.); mucus membranes (eye, mouth, nose, throat, stomach, small intestine, large intestine, uterus, vaginal and testicle).

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A Comparison of Case Studies in the Treatment of Carpal Tunnel Syndrome: TCM Acupuncture versus FSN Acupuncture

Alexander B. Mearns, Lic. Ac.

Fellow Member of ATCM UK, and Member of the FSN Association of Europe

Private Clinic, Tain, Ross-Shire, Scotland

Abstract

Two cohorts of five patients suffering from Carpal Tunnel Syndrome were compared. The results of a cohort of five which was treated with TCM acupuncture in 2014 was compared to another cohort of five which was recently treated with FSN acupuncture. The FSN treatment had a quicker effect. With the FSN approach, the patients experienced significant relief after one treatment, and then had a follow-up. With TCM, the patients required two to three treatments and a follow-up.

Keywords

Acupuncture, Carpal Tunnel Syndrome, FSN, TCM

Introduction

Carpal Tunnel Syndrome, CTS, occurs when the medial nerve is compressed at the wrist in the carpal tunnel. This is the commonest form of nerve entrapment. The prevalence of carpal tunnel syndrome in the UK is 7–16%. A UK General Practice Research Database found that 88 men and 193 women present as new cases per 100,000 population, per year. (Royal College of Surgeons, 2017)

With respect to traditional acupuncture, it has been said that CTS falls into three patterns (Flaws & Sionneau, 2002):

- Blood Vacuity not Nourishing the Sinews and Vessels
- Qi Stagnation and Blood Stasis
- Wind Damp Impediment

In a study published on the TCM treatment of CTS in 5 case studies (Mearns, 2014), the author found that Spleen Vacuity was also an important underlying pattern, along with some local heat. Success was good. The CTS was resolved for three of the patients after 3 treatments, one patient had 4 treatments, while one patient estimated a 40% improvement after 3 treatments.

Since the publication of the study in 2014, the author has trained in a modern form of acupuncture known as Fu's Subcutaneous Needling, FSN, or more poetically in Mandarin as Floating Needle. The results have been encouraging, and it appears to resolve many complaints much quicker than TCM acupuncture. Consequently, it was decided to audit recent CTS conditions which were treated with FSN acupuncture to discover if there were any advantages. Five patients were chosen, and all had a diagnosis of CTS. Other similar patients were available, but they lacked a clear diagnosis of CTS.

An introduction to FSN:

FSN is new development in Chinese Medicine. It was invented by Dr Zhong-hua Fu in 1996 in Nanjing,

China. FSN involves a modified acupuncture needle which is manipulated to stimulate areas near tightened muscles and has been effective in treating musculoskeletal conditions and its use has expanded for other conditions. The FSN needle inserts sideways into the subcutaneous layers and so this technique is almost pain free, and very safe. It has been found that it can relieve pain very quickly.

To begin an FSN treatment the practitioner palpates for tightened muscles related to the problem. An insertion point is selected outside of the tightened area and after insertion of the needle into the subcutaneous layer the needle is then manipulated with a sweeping technique referred to as a swaying movement. It has been found that the technique works best when the tight muscle is flexed against resistance by the practitioner during the swaying movement and this process is referred to as reperfusion. Reperfusion is complete when the targeted muscle is relaxed. The practitioner can then look for other associated muscles if the condition is not resolved.

The specialised FSN needle is made up of a metal section contained within a separate plastic casing, the cannula. At the end of a session, the metal part of the FSN needle is removed, but the plastic cannula can be retained to continue stimulating the affected area. The cannula is usually retained for 2-24 hours and is safely secured in position by a suitable plaster. The cannula should not be uncomfortable, and the patient should carry out normal day to day tasks.

The mechanism of operation of FSN is being researched. At present there is some evidence that the mechanism involves the fascia layers (Fu, 2016), and the recent discovery of the interstitium is now coming under consideration (Benias, 2018).

Case Studies of FSN Treatments:

Case One:

Female, 40 years-old, dentist

This patient had CTS in both hands. It was

particularly worse at night and frequently woke her up. She previously had treatment, not acupuncture, from a chiropractor. She was on medication for hypertension.

FSN treatment:

Tightness was found on the flexor carpi radialis, on both arms. An insertion site was chosen toward the proximal end of the muscle but leaving sufficient room for needle manipulation. After reperfusion, a second, more distal insertion site was selected. After reperfusion the patient felt the problem was relieved almost completely. She did not make another appointment.

Case Two:

Female, 46 years-old, electrician

Both of this person's hands were affected with a numbness and a tingling sensation. It was worsened by movement, which was aggravated by her work as an electrician.

Treatment one: Tight muscles were located on the flexor carpi radialis and the brachioradialis on both her forearms. An insertion point was chosen on the proximal end of the muscles and her pain disappeared quickly during reperfusion. She was treated bilaterally.

Treatment two: She came for treatment again nearly three years after her initial treatment. She had been pain free during the three years until a few weeks before coming in for treatment again. The problem was very similar, and the same muscles, the flexor carpi radialis and the brachioradialis, were treated as before. In addition, her left supraspinatus was also treated. Her forearms were treated twice, initially and then after a rest period of twenty minutes. The casing was retained on her left forearm. She felt much better and hasn't returned for additional treatment. (one year from time of writing)

Case Three:

Female, 32 years-old, accountant

Both hands were affected but worse on the right. Typing made the pain worse, which was a necessary part of her job.

Treatment one: Her left brachioradialis was treated, and on her right arm both her brachioradialis and her flexor carpi radialis were treated. After a rest period, treatment on her right brachioradialis was repeated. She was also treated for a problem in her lower back.

Treatment two: She returned a week later and didn't need further treatment for her CTS, or for her back. A problem on her left shoulder was treated instead.

Case Four:

Female, 75 years-old, retired

Treatment one: Her CTS was on her right side and had been a problem for over a year. Her brachioradialis and her flexor carpi radialis were both tight and both were treated. She had an immediate improvement.

Treatment two: She was nearly problem free, with a

slight tingling on her middle finger. An insertion point was chosen halfway along the forearm and on the margins of the flexor carpi radialis and the brachioradialis. She hasn't returned for treatment. (1 ½ years from time of writing)

Case Five:

Female, 66 years-old, retired

She had CTS in her right hand for several years but put up with it. She fell and broke both her arms and the CTS disappeared but returned much worse as her arms recovered.

Treatment one: It was noticed that her right bicep was very tight, in addition to her right brachioradialis and flexor carpi radialis. All three muscles were treated. Insertion points were on her proximal bicep, and mid-way on her brachioradialis and on her flexor carpi radialis. The casing was retained in her flexor carpi radialis. There was an immediate improvement.

Treatment two: She said there was, "a vast improvement", but there was still a mild tingling in her thumb and next two fingers. Insertion points were again chosen mid-way on her flexor carpi radialis and on her brachioradialis. She hasn't returned for further treatment.

Discussion

The TCM approach to CTS published in the 2014 paper was very successful. Most patients were relieved of their CTS pain in three treatments, and one received four treatments. With the FSN approach, 2 of the 5 patients appeared to have satisfactory results after one treatment. The other 3 of the five received 2 treatments. It therefore appears that the FSN approach works even more quickly than TCM.

In both sets of patients, the TCM cohort and the FSN cohort, the long term effects are hard to measure. In a few cases patients returned for treatment after a year or more and so the longer term effects could be verified. For the most part, with both sets of patients it must be assumed that they didn't return for treatment because they didn't need it. If this isn't true, then at least it is equally untrue for both cohorts.

As a practitioner it was very obvious that with the FSN approach the patients got relief immediately during the their reperfusion. Such a quick response was not evident with the TCM treatment.

Conclusion

Based upon comparing cohorts of five case studies each, of both the TCM and the FSN treatment of CTS, the FSN treatment had a quicker effect. With the FSN approach, the patients experienced significant relief after one treatment, and then had a follow-up. With TCM, the patients required two to three treatments and a follow-up.

(continuing on page 28)

应用《伤寒钤法》精准治疗伤寒六经病的临床报告

张 隽, 朱红影

(Morley Chinese Acupuncture and Herbs Ltd 经方针灸古法复原应用研究室)

摘要 笔者应用《伤寒钤法》的运气干支学说, 结合《伤寒论》之经方理法, 在临床中根据患者出生年支和发病日干支诊病辨证, 选方用药, 初步实现了临床精准治疗伤寒六经病的目标, 使这项埋藏千年的中医瑰宝重放异彩。

关键词 伤寒钤法 精准治疗 伤寒六经病 临床报告

Clinical applications of Six-channel Syndrome Differentiation Approaches from perspective in 'Shanghan Qian Methods'

Juan Zhang Hongying Zhu

Abstract: The authors have clinically applied Yunqi Ganzhi Theory in 'Shanghan Qian Methods', supplemented by the six channel syndrome differentiation approaches by Zhang Zhongjing's 'Shanghan Lun' to formulate prescriptions to manage six cases successfully. Based on the date of birth plus the onset date of disease or condition, a diagnosis or a syndrome is confirmed to help choose classic formula and herbs with precision and effectiveness. We have achieved the goal for clinicians to manage six channel syndromes. The great value of Shanghan Qian Methods has been rediscovered, which has been unused for a thousand years.

Key words: Shanghan Qian Methods, Precision treatment, Six Channel Syndromes, clinical application.

1. 《伤寒钤法》简介

钤[qian], 指印章或钳刀, 兵法; 又指锁; 引申为关键, 法, 法则[1]。

也有人说这个“钤”是“钳子”的意思, 两头一钳, 就抓定了。

《伤寒钤法》[2] (以下简称《钤法》) 即是治疗伤寒六经病的关键法则, 是《伤寒论》[3] 条文的使用密码。



《钤法》在中国中医史上历来是秘传不宣, 到成无己 (宋金医学家, 约 1063~1156 年) 注解《伤寒论》时才略有片语微露, 直到刘完素 (金代医学家, 约 1120~1200 年) 完整口传后由其弟子马宗素 (金元医家, 12 世纪~约 1271 年) 撰成《钤法》一书公开于世。后世的程德斋 (元代医家, 1324~

1328 年)、熊宗立 (明代医家, 1409~1482 年)、高昶 (明代医家, 约 1481~1556)、薛己 (明代医家, 1487~1559)、曹乐斋 (清代医家, 1800~1880) 等一些精于《钤法》的名医也撰述或著书接力传承《钤法》。明代朱橚[sù] (周定王, 1361 年~1425 年) 编撰刊行的《普济方》是其中的杰出代表作, 该书今仅存残本, 清初编《四库全书》时将其改编成 426 卷予以收录。1959 年, 人民卫生出版社以《四库全书》中所载《普济方》为主本, 参考古代遗存的残卷重新进行校勘、重印、出版发行了《普济方》[4] 一套十册, 其第三册 4--1 诸疾卷 123~125 中收录的《钤法》条文, 以歌诀形式编排出宋本《伤寒论》中所有的条文和方药, 并标有序号供推算检方所用, 是我们研究《钤法》的重要参考资料。

《钤法》是根据患者的出生年支 (属相) 和发病日干支, 结合色脉与四诊, 以推求六经病证和相对应的《伤寒论》条文以及相应经方的一种特殊的中医诊疗方法, 其融汇了《内经》[5] 运气学说和《伤寒论》之经方理法精华, 是研究应用伤寒经方和临床辩证论治伤寒六经病的必读之书。

《伤寒论》中所载的 113 个方剂被后世医家称

为伤寒经方。《汉书·艺文志》[6]“方技略”中说：“经方者，本草石之寒温，量疾病之浅深，假药味之滋，因气感之宜，辨五苦六辛，致水火之齐，以通闭结，反之于平。”其特点是药专力宏，味少而精。若选方用药精准，方证相对的话，则“覆杯而愈、效如桴鼓”。但若方不对病，药不对证，则不仅延误病情，甚者还会危及生命，因此，临床中如何明确辨病，精准用药就显得十分重要。笔者多年来潜心研究复原《钤法》的运气算术，结合《伤寒论》之理法方药运用于中医临床，初步实现了“非此方不能治此病，非此药不能成此方，所投必效，如桴鼓之相应”[7]之精准治疗六经病的目标。

2, 临床报告

2.1, 太阳病临床治验

病案号: QF-G082

基本信息: 男, 1948年生人。2019年4月21日发病。2019年5月4日初诊。

主诉: 咳嗽, 胸闷, 气短, 疲劳两周。两周以来咳嗽, 气短, 疲劳。西医诊断为胸膜炎, 曾用抗生素五天无效, 后又给予一种强力消炎药治疗仍无效。晚上吐白痰, 自我感觉呼吸窘迫, 心烦, 口渴, 胸闷, 胸部和上腹部触痛拒按。下午时分身体忽冷忽热。睡眠差(2-5小时/每晚)。大便不爽。舌质鲜红, 舌尖尤甚, 苔黄厚腻。

钤法推演: 戊子年生人。戊子日发病。依《伤寒钤法》推演属太阳病震字号。

钤法歌诀:

汗出复下大便难, 渴而舌燥又无眠,
日晡潮热从心下, 少腹坚来五六天,
痛满连脐不可近, 气虚腹内更相煎,
小陷胸汤须臾进, 饵下能教重病痊。

伤寒论条文: 第137条: 太阳病, 重发汗, 而复下之, 不大便五六日, 舌上燥而渴, 日晡所小有潮热(一云: 日晡所发心胸大烦), 从心下至少腹, 硬满而痛, 不可近者, 大陷胸汤主之。

第138条: 小结胸病, 正在心下, 按之则痛, 脉浮滑者, 小陷胸汤主之。

选方用药: 小陷胸汤加大黄, 中药配方颗粒一周。

结果反馈: 2019年5月11日二诊告知, 所有症状消失95%。继续守方给药一周后, 电话反馈诸症状(咳

嗽, 胸闷, 气短, 疲劳)均已经消失。

2.2, 阳明病临床治验

病案号: QF-Z001。

基本信息: 男, 1965年生人。2019年3月14日发病。2019年5月14日就诊。

主诉: 手掌皮肤皴裂2个月, 口角糜烂一周。患者于2个月前手掌皮肤皴裂, 一周以来又出现口角糜烂, 逐日加重, 食欲略偏盛, 易饥饿, 乏力, 口干舌燥, 渴而欲饮, 心烦胸闷, 多梦, 无汗, 小便利。舌暗红, 无苔, 脉浮略大。

钤法推演: 乙巳年生人。庚戌日发病。按《伤寒钤法》推演属于阳明病火字号。

钤法条文:

渴欲饮水口舌乾, 中焦客热燥烦添,

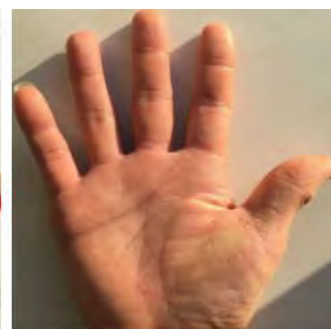
白虎人参汤宜治, 润燥除邪病始痊。

伤寒论条文: 《伤寒论》第222条: 若渴欲饮水, 口干舌燥者, 白虎加人参汤主之。

选方用药: 白虎加人参汤, 中药配方颗粒剂一周。



服药一天后



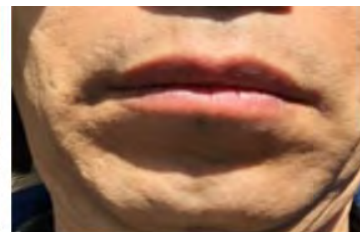
服药一周后

结果反馈: 效如桴鼓。患者服药一天后就感觉症状明显减轻, 双手掌皮肤皴裂和口角糜烂减轻(见附图)。患者欣喜不禁, 自己拍下右手和口唇部位的图片反馈。继续守方服中药一周, 诸症消除(见附图)。

按注: 这个病若依临床常规的诊疗用药思路, 一般



服药一天后



服药一周后

情况下是想不到用“白虎人参汤”的。虽出乎意料而又在法规之内, 这也许就是《伤寒钤法》令人痴迷的魅力吧。

2.3, 少阳病临床治验

病案号: QF-M197。

基本信息: 男, 2012年生人。2019年6月20日发病。2019年7月19日初诊。

主诉: 湿疹, 哮喘, 呼吸不畅, 胸闷, 盗汗7个月, 加重1个月。

患者自7个月前患湿疹至今, 分布于双手, 前胸, 双下肢部位, 曾用英国和波兰西医的多种疗法(包括西药内服、膏剂外用), 也曾及其它中医诊所针药治疗, 效果均不明显。患儿哮喘七个月伴呼吸不畅, 胸闷, 心烦, 夜间加重, 偶有呼吸暂停现象, 严重时需吸氧才能缓解症状; 睡眠差, 夜间盗汗严重, 鼻塞, 经常用口呼吸, 还经常有鼻出血; 今年6月20日曾出现过两次鼻出血伴头痛现象; 刻下望见患者烦躁不安, 但卧不坐, 疲态明显。舌暗红, 无苔, 舌尖部有红点。

钤法推演: 壬辰年生人。戊子日发病。依《伤寒钤法》推演属于少阳病纪字号。

钤法歌诀:

辰戌相人阳日病, 子午相人阴日病,
两般皆发少阳病, 柴胡汤剂所主证。

伤寒论条文: 第266条: 本太阳病不解, 转入少阳者, 胁下硬满, 干呕不能食, 往来寒热, 尚未吐下, 脉沉紧者, 与小柴胡汤。

选方用药: 小柴胡汤, 中药配方颗粒一周。

结果反馈: 患者服药一周后于2019年7月25日二诊时反馈, 鼻塞基本消失、皮肤湿疹完全消失, 一周以来未再出现呼吸困难的症状, 患者及母亲非常满意。效不更方, 守一诊方继续服用二周。

患者一家回波兰度假后于2019年9月2日三诊时反馈, 自从服中药以来大约五周多未再出现呼吸困难的症状, 皮肤湿疹已经消失, 偶有鼻塞。并高兴地拿出一份波兰当地西医给患儿做的检验报告单, 指着其中特别标注的两处指标说: “经过你们诊所的中药治疗, 不仅各种症状明显改善, 而且这个与皮肤病相关的指标 *dermatophagoides farinae* 检测数值大幅度降低: 以前 11.4U/L, 现在 3.4KU/L, 已基本趋近正常值; 另一个指标 *dermatophagoides pter* 检测数值也有改善: 以前 18KU/L, 现在 16.4KU/L。” 还说他们波兰当地的医生也很惊讶这个结果, 因为之前多年治疗, 并曾给予强效抗生素、激素, 这些指标也一直没出现大的变化, 现在仅经过四周的中药治疗相关指标就改善明显。

按注: 该患者经年久病, 曾经过中西医各种疗法和药物治疗多年, 临证考虑从“坏病”“杂病”去辩证论治的思路是正确的, 治疗结果也印证了这一点。2019年12月31日随访患者: 湿疹、哮喘和呼吸不畅完全消失, 至今五个多月未见复发。

2.4, 太阴病临床治验

病案号: QF-C127

基本信息: 女, 1995年生人, 2018年12月17日发病。2019年6月15日初诊。

主诉: 闭经6个月。

两年前曾在怀孕六周时人工药物流产, 随后使用注射避孕两年, 6个月前停止避孕针, 但是6个月过去了仍未见月经来潮。睡眠可, 饮食、二便正常。舌质红, 无苔, 舌尖红。

钤法推演: 乙亥年生人, 癸未日发病。依《伤寒钤法》推演属太阴病母二号。

钤法歌诀:

自利不渴难下食, 中焦寒在理中温;
脉微细且但欲寐, 用药考虑四逆辈。
胸腹胀痛有瘀堵, 运气掌诀大柴胡。
(注: “运气掌中诀”记录 用大柴胡汤)

伤寒论条文: 第277条: 自利不渴者, 属太阴, 以其脏有寒故也。当温之, 宜服四逆辈。

选方用药: 大柴胡汤, 中药配方颗粒一周。

结果反馈: 2019年6月27日二诊反馈, 服药第五天于2019年6月20日月经来潮, 经期七天。二诊继续守首诊方给予大柴胡汤中药配方颗粒一周, 2019年8月2日患者来诊所反馈, 连续两个月的月经均按时来潮, 并取消了第三次的预约。

2.5, 少阴病临床治验

病案号: QF-H166

基本信息: 男, 1992年生人。2019年10月22日发病。2019年10月31日初诊。

主诉: 湿疹4年, 加重9天。

4年以来患湿疹, 9天前加重, 皮损遍布全身以双上肢为甚(见附图), 夜间痒甚。曾服用西药(包括激素及免疫抑制剂)两年半, 无效, 现在已经停服西药四十天(西医检查发现药物的副作用已经导致患者的白细胞低于正常值)。平时有压力, 思虑过度, 易怒, 手脚冰凉, 怕冷。舌质红, 苔略水滑。

钤法推演: 壬申年生人。壬辰日发病。依《伤寒钤法》推演属少阴病人字号。

钐法歌诀：

少阴四逆肢不温，有时泄下还腹痛，
小便不通或咳悸，四逆散煎即可用。

伤寒论条文：第 318 条：少阴病，四逆，其人或咳，或悸，或小便不利，或腹中痛，或泄利下重者，四逆散主之。

选方用药：四逆散，中药配方颗粒一周。

治疗前



结果反馈：服药一周后，2019 年 11 月 7 日二诊反馈：双上肢皮肤湿疹已基本消失（见附图），全身其它部位的皮损也明显好转，继续服首诊方 2 周，2 周后她来电话反馈：全身的湿疹已经全部消失。

治疗一周后

2.6，厥阴病临床治验

病案号：QF-I026

基本信息：男，2017 年生人。2018 年 4 月 21 日发病。2018 年 6 月 20 日初诊。

主诉：湿疹 10 月余，加重 2 月。

患儿自四个月大时开始全身出现湿疹至今 10 月余，2 个月来加重伴小疱疹，便秘与腹泻交替。

钐法推演：丁酉年人。癸未日病。依《伤寒钐法》推演属厥阴病坤字号。

钐法歌诀：

呕而发热小柴胡，大吐大下胃气虚，
极汗出者气怫郁，猪苓或调胃承气。

伤寒论条文：第 379 条：呕而发热者，小柴胡汤主之。

选方用药：小柴胡汤，中药配方颗粒婴儿量三周。

结果反馈：服药三周后，家长电话反馈：该患儿全身湿疹、小疱疹已全部消除，大便正常。

3，讨论：

笔者经多年临床应用与研究发现，《伤寒论》这本千余年被历代医家推崇备至，但却一直被认为是辩证加减、经验主义方剂汇编式的“药方书”，在用《钐法》的运气干支方法推演重排后，113 个方子之间的规律立刻彰显，条理清晰，井然有序，且标的明确，指向精准，俨然具有了现代临床专方专病的特点。虽然《钐法》在辨病认证方面不依常规，难以理解，但依法推演后的择方选药应用于临床，疗效确切真实，常常出人意料，加之《钐法》在临床应用中无须与患者见面，只需获知患者准确的出生年（或属相）和发病日，就可立即进行诊断并给出治疗方药。

因此，笔者认为有必要对《钐法》在经方诊疗标准化、精准化、远程化方面的应用前景和深度做进一步的尝试与探讨。笔者相信，随着对《钐法》的复原与解密以及相关研究的逐步深入，这项埋藏千年的中医瑰宝必将大放异彩，造福人类。

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文献综述

中医药治疗慢性支气管炎概述

浙江中医药大学博士研究生 ANGELA HUMPHREYS

【摘要】慢性支气管炎属中医学“喘证”、“咳嗽”等范畴，认为是由于六淫外邪侵袭肺系，导致肺失宣肃、肺气上逆；或因脏腑功能失调，痰浊内蕴致肺气无所主，肾失摄纳所致。以肺脾肾虚为本，外感六淫之邪为标。古今中医名家，根据各自的临床经验，对其病因病机、辨证施治、针灸治疗、贴敷法以及中成药等，提出了各自的理论和疗法。这里仅将与临床应用有关的文献总结如下。

【关键词】慢支，中医药，贴敷法，针灸

慢性支气管炎(chronic bronchitis)是临床上的常见病与多发病，中老年人发病率高，病程长，起病隐蔽。多在寒冷季节发病，表现为咳嗽、咳痰或喘息等。随着病情发展，还可对患者的肺功能、心功能造成损伤，降低患者的生活质量。中医治疗慢性支气管炎的方法大致可分为内治和外治两大类。内治法是根据辨证分型，通过内服中药达到宣肺化痰、止咳平喘的目的，多在补肺益肾、祛痰止咳的基础上，或散寒、或润燥、或除湿。外治法则包括针灸、贴敷法等。

一、病因病机

中医认为，慢性支气管炎主要因为六淫外邪侵袭肺系，导致肺失宣肃，肺气上逆；或脏腑功能失调，痰浊内蕴致气无所主，肾失摄纳。如《素问·至真要大论》云：“诸气膹郁，皆属于肺”；《素问·咳论》云：“五脏六腑皆令人咳，非独肺也。”《证治准绳》亦云：“肺虚则少气而喘，若久病仍迁延不愈，由肺及肾，则肺肾俱虚，或劳欲伤肾，精气内夺，根本不固，皆使气失摄纳，出多入少，逆气上奔而发喘。”表明了中医“咳嗽”、“喘证”的病位在肺，日久累及于肾。宋·杨士瀛《仁斋直指附遗方论·咳嗽方论》曰：“所以咳嗽者，痰塞胸膈，气逆不下，冲击而动肺耳。”表明咳嗽的病机为肺失宣肃、肺气上逆所致。《景岳全书》云：“咳嗽之要，止为二证。何为二证？一曰外感，一曰内伤而尽之矣”；《医学心悟·咳嗽》曰：“肺体属金，譬若钟然，钟非叩不鸣。风寒暑湿燥火，六淫之邪，自外击之则鸣；劳欲情志饮食炙搏之火，自内攻之则亦鸣。”指出其病因有外因和内因两方面。由此可见，古人早已认识到正气虚弱，宿痰伏肺是发病的内在因素，而感受外邪则是导致急性发病的诱因。张景岳曾倡：“六气皆令人咳，风寒为主”，认为以风邪夹寒者居多。慢支患者病素有肺肾气虚，常因感受寒凉，气温变化，加之体内痰饮之邪积久未散而导致急性发病。在此基础上，现代医家也根据各自的临床经验，提出了不同的观点：边立忠[1]等认为慢性支气管炎急性发作期多由于外邪内袭，引动宿疾，其病位在肺，病机为肺气郁闭，宣降失司，痰浊内阻，气机上逆所

致。丁念[2]认为外感六淫犯肺，或内伤脏腑、水液代谢障碍，均可致肺失宣肃、痰湿聚积而发为咳嗽。曹晖[3]认为外感六淫，初起以上焦肺失宣降而致咳嗽痰多，胸闷气短，呼吸困难，久咳伤肺，肺气亏虚，子病及母可致中焦脾虚，运化水液失司，聚湿生痰储肺而致咳嗽、咳痰甚至喘息。其病机多为虚实夹杂，以表邪为主。陈友菊[4]认为慢性支气管炎多因久病肺虚，外感失治，痰浊水饮停积，阻塞气道，血行不畅，肺失宣降，上逆而为咳嗽。李毅等[5]认为病变机理为，素有痰饮之人，脾肺之气必虚，今又外感风寒，外寒内饮相搏，壅塞于肺，肺失清肃而病症纷纷现呈。周振强[6]认为久咳伤肺，或肺病及脾、痰浊内生，或久病肾亏、纳气无权，使肺、脾、肾三脏功能失调是本病的病机所在，而外邪引触是急性发病的关键。

二、辨证施治

《中医内科病证诊断疗效标准》将咳嗽分为 8 种证型：(1) 风寒袭肺；(2) 风热犯肺；(3) 燥邪伤肺；(4) 痰热壅肺；(5) 肝火犯肺；(6) 痰湿蕴肺；(7) 肺阴亏虚；(8) 肺气亏虚。《中药新药临床研究指导原则》将慢性支气管炎候诊断标准分为：风寒束肺证、风热袭肺证、风燥伤肺证、痰湿壅肺证、痰湿犯肺证、肺气虚弱证和肺肾阴虚证七种证型。在临床实践中，临床医生常根据自己的经验进行辨证分型：邱志济等[7]总结朱良春的临床经验，将咳嗽分为外感和内伤，外感咳嗽为实证，又分风寒、风热和燥热 3 型；内伤咳嗽为虚证，分为痰湿咳嗽和阴虚咳嗽 2 型。对于风寒咳嗽，自拟旋覆夏麻芍草汤（旋复花 8g，半夏 10g，麻黄 2g，茯苓 6g，白芍 3g，生姜 3 片，甘草 3g）为主方；对于风热咳嗽，自拟清肺定喘汤（金荞麦 20g，鱼腥草 15g，白花蛇舌草 20g，天浆壳 12g，橘红 6g，苍耳子、枇杷叶各 10g，甘草 5g）为基本方治疗咳嗽。郭五存[8]认为该病可分为 3 型：痰湿型、肺燥型、肾虚型。痰湿型治以燥湿化痰止咳，方药为：茯苓、陈皮、枳实、半夏、知母、川贝各 6g，紫苏子 5g，胆南星 15g，炙甘草、生姜各 3g；肺燥型用润肺清燥化痰法，方药为：熟地、麦冬各 30g，山茱萸 12g，

玄参 15g,沙参 9g,紫苏子、牛膝、天冬、甘草各 3g,紫苑 15g;肾虚型用培元补肾阴阳法,方药为:熟地 75g,茯苓 60g,山药、山茱萸、麦冬、牡丹皮各 45g,泽泻 30g,五味子 25g,肉桂 15g,炼蜜为丸。邵长荣等[9]将本病分为 2 型:肺气虚咳喘型和肾虚咳喘型。肺气虚咳喘型用三参养肺汤(太子参 12g、玄参 12g、沙参 12g、款冬花 9g、胡颓叶 15g、黄芪皮 12g、车前草 12g、黄芩 9g、海蛤壳 18g、海藻 12g、地龙 9g、苍耳子 9g);肾虚咳喘型用三桑肾气汤(桑葚子 12g、桑白皮 9g、桑寄生 12g、五味子 4.5g、黄精 12g、补骨脂 12g、平地木 12g、功劳叶 12g、老苏梗 9g、防己 9g、昆布 12g)治疗。杨廷光[10]将慢性支气管炎分为实证、虚证、上实下虚证 3 型。实证治以肃肺化痰法,偏寒者方用清饮煎(麻黄 3g,杏仁 10g,甘草 6g,防风 10g,钩藤 12g,鹅管石 12g,胆南星 10g,紫苏子 10g,葶苈子 10g);偏热者方用咳喘煎(生麻黄 3g,紫苏子 10g,黄芩 10g,百部 30g,款冬花 10g,鱼腥草 15g);虚证以益肺补肾为大法,方用虚咳煎(肉桂 2g,五味子 10g,沉香粉 2g,黄芪 15g,防风 10g,鹅管石 12g,鱼腥草 30g);上实下虚者用喘咳停(麻黄 10g,钩藤 30g,地龙 10g,蝉蜕 5g,桃仁 10g,仙茅 12g,淫羊藿 12g)。

三. 贴敷法

崔静等[11]用菟丝子 120g,牛膝 100g,白芥子、僵蚕、延胡索各 30g,甘遂、细辛、麝香(人工)、丁香、肉桂各 10g 共研成细末,以猪油加鲜生姜汁调成膏状备用。敷膏 3cm×3cm 左右,贴于肺俞、心俞、膈俞、中府、神阙、膻中、定喘穴。每年夏至、冬至时开始贴药,每次贴药 4-6 小时,间隔 7-10 天贴 1 次,连续 3-4 次为 1 疗程,3 年为 1 大疗程。126 例中,显效 79 例,占 62.7%,有效占 46 例,占 36.5%,无效 1 例,总有效率为 99.2%。许洪平等[12]将两组病例均给予西医常规治疗,治疗组在基础治疗上加用中药贴膏作穴位贴敷,对照组给予基础治疗,并用与治疗组相同外观的对照安慰贴膏,结果显示治疗组总有效率、显效率分别为 93.3%、63.3%;对照组分别为 70.0%、36.7%;治疗组均优于对照组。

四. 针灸疗法

针灸疗法包括针刺、艾灸、拔罐、刺络、温针、电针等。陈强等[13]采用针灸拔罐治疗慢性支气管炎,针刺取穴为华佗夹脊穴、双足三里穴,待针用特定电磁波照射背部,隔日治疗 1 次,并隔日行拔罐治疗,治疗 2 个疗程后,痊愈 31 例(73.8%),显效 9 例(21.4%),无效 2 例(4.8%),总有效率 95.2%,并用自身对照法于治疗前 1d 及治疗后第 2d 检测 T 淋巴细胞亚群及血流变。实验证明针灸能加强白

细胞吞噬功能,提高数十种免疫功能指标,增强抗病能力。周国容等[14]测采用针刺并举治疗喘息型慢性支气管炎发作期,疗效满意。治疗组予针灸,选风池、曲池,针刺得气后捻转泻法;足三里、丰隆、定喘平补平泻;少商左右手交替,1 次/d;大椎三棱针点刺放血,1 次/d。方药予止嗽散加减。对照组采用西医常规治疗,结果显示治疗组均优于对照组,2 组间疗效比较有显著差异。

结语

综合以上文献可以看出,中医药治疗慢性支气管炎的方法多种多样,且不良反应少,有较大的优势。所以我们应该认真总结古今医家治疗慢性支气管炎的宝贵经验,筛选其中确有疗效的方法与处方,并运用现代科学技术进一步验证和升华,进一步提高中医药在英国的声望。

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张恩勤经方研究和运用的学习小结

郑淋月 浙江中医药大学博士研究生

摘要：张恩勤老师曾是著名伤寒专家李克绍教授的研究生，后来又随著名临床家吕同杰教授行医近十载。他自 1982 年起在山东中医药大学伤寒教研室任教，同时在附属医院临床。出国后先后在苏联、阿瑟拜疆、土耳其、英国等行医教学。观其处方，多以东汉医家张仲景之经方为主。本人作为学生之一，有幸聆听他的讲课，亲眼目睹他运用经方治疗许多疑难病症，收效甚佳。现将学习心得，小结如下：

关键词： 经方 临床应用

一、经方研究和应用的思路与方法

张老师首先重视对《伤寒论》和《金匱要略》原文的研究和背诵。尤其致力于经方临床应用的分析与总结。同时，他结合现代药理实验来探讨经方复方的治疗机理，借以拓宽经方的临床应用范围。1989 年他曾主编的《经方研究》。该书由著名伤寒专家刘渡舟教授作序、黄河出版社出版。2012 年又编写英文版《伤寒论研习指导》，由人民卫生出版社出版。这两本书具体体现了他对经方研究和应用的思路与方法。概而言之，有以下三个方面：

1. 原文指正：在他所编的两本书中，每方都是首设‘原文指正’，即直取《伤寒论》和《金匱要略》两书中有关某一个经方所有原文排在一起，然后综合分析一个经方的原主症内容，使读者对经方的原治疗范围一目了然。
2. 当代应用：这是他研究经方的重点。如在《经方研究》中，他曾全面收集了 1981 年以来（即王琪主编的《经方应用》出版之后）国内外医药刊物发表的所有有关经方应用的临床报道；而在 2012 年出版的《伤寒论研习指导》中，他又收集近年来所有有关《伤寒论》方剂运用的最新资料以及他本人运用经方的经验，并增加了一些有效验方，以补《伤寒论》原方之不足。
3. 药理研究：他认为经方复方的药理研究，对揭示经方的治疗机理和拓宽经方的运用范围大有帮助。所以，他早在 1988 年就与山东中医药专科学校药理教研室主任刘维新教授等合作，对经方复方进行了大量的药理实验。

二、经方的治病举例

张老师善于运用经方治疗许多疑难病症，如哮喘、气管炎、肺源性心脏病、风湿性关节炎、类风湿性关节炎、颈椎病、胆囊炎、胆石症、胃肠疾病、克

隆氏病、冠心病、心律失常、白塞氏病、瘰病、抑郁症、焦虑、失眠、梅尼尔氏综合征以及妇科病等。因篇幅所限，仅简介 4 例如下：

1. 用小青龙汤治疗哮喘：《伤寒论》中有关小青龙汤的原文有第 40 条、41 条；在《金匱要略·痰饮咳嗽病脉证并治第十二》有 2 条，在《金匱要略·妇人杂病脉证并治第二十二》还有 1 条⁽¹⁾。原方是由麻黄、芍药、细辛、干姜、炙甘草、桂枝各三两，五味子半升，半夏半升组成。由于在英国多用中药浓缩粉，张老师改细辛剂量为浓缩粉 0.3 克，其他均为浓缩粉 1 克。由于麻黄因兴奋大脑皮层易引起患者失眠，兴奋交感神经和收缩血管使心率增快而导致心悸、血压升高，故张老师改用白果代替麻黄，效果亦佳。有一位女大学生患哮喘 2 年，时常发作，呼吸困难，咳嗽有痰以及胸闷不适等。张老师用小青龙汤加减，并配合针灸，2 周症减，4 周后恢复正常。
2. 大柴胡汤治疗胆囊炎和胆石症：《伤寒论》中有关大柴胡汤的原文有第 103 条、136 条、165 条；在《金匱要略·腹满寒疝宿食病脉证第十》1 条。原方由柴胡半斤、黄芩三两、芍药三两、半夏半升、生姜五两、枳实四枚、大枣十二枚组成⁽²⁾。张老师在用此方治疗胆囊炎时，上药剂量均改为浓缩粉 1-1.5 克；芍药用白芍 1 克。再加枳壳、木香各 1 克，用以缓解胆绞痛。对伴有胆结石的，加金钱草 2 克、郁金 1 克、茵陈 2 克，以化石利胆排石。一位德国男工程师患胆囊炎合并胆结石 3 个月，表现为右上腹绞痛时作，痛连右肩背，因惧怕手术而来请求中药治疗。张老师以此方加减，1 周痛减，3 周后诸症消失。
3. 半夏泻心汤治疗慢性胃炎：《伤寒论》有关半夏泻心汤的原文是第 149 条；在《金匱要略·呕吐下利病脉证第十七》1 条。原方由半夏半升，黄芩、干姜、人参、甘草各三两，大枣十二枚组成⁽³⁾。张教授改各药的剂量为浓缩粉 1 克，用来治疗浅表性

胃炎以及消化道溃疡和急性胃肠炎等症见心下痞满者，效如桴鼓。有一皇室成员患慢性胃炎，心下痞满，嘈杂难忍。因她怀疑自己患上了胃癌，情绪紧张，烦躁不安。她吃过不少的西药，不但无效，反而引起便秘、胃部嘈杂加重等副作用。张老师予以半夏泻心汤加减口服，并配合针灸。2 周后症减，3 个月后胃镜检查正常。

4. 白头翁汤治疗克隆氏病：《伤寒论》有关白头翁汤的原文有第 371 条和第 373 条。原方由白头翁二两、黄柏三两、黄连三两、秦皮三两组成⁽⁴⁾。张老师把各药剂量改为浓缩粉 1 克。有一位女律师因患克隆氏病 2 年前来就医，症见腹痛、便血和膝关节疼痛等。曾用过多种西药无效。张老师用此方加仙鹤草 2 克、苍术 1 克、黄柏 1 克等，2 周后便血停止，膝关节疼痛减轻。一个月后症状消失。

结语

张恩勤教授对经方研究和应用的思路和方法包括三个方面：原文原方、临床应用和药理研究。其重点是临床应用。本文仅介绍了他应用小青龙汤治疗哮喘、大柴胡汤治疗胆囊炎和胆石症、半夏泻心汤治疗慢性胃炎和白头翁汤治疗克隆氏病，以举一反三，供同道参考。

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解郁汤与针推合用治疗焦虑症

浙江中医药大学博士研究生 郑淋月

摘要：焦虑症（anxiety disorder）是目前临床上常见的一种神经症，以焦虑情绪为主要特征。焦虑症属中医学‘脏躁’、‘惊恐’、‘心悸’、‘不寐’、‘郁证’等范畴。多因郁火、痰热内郁，上扰神明；或心肾亏虚，阴阳失衡所致。本人应用自拟“解郁汤”，配合针灸和推拿，治疗 10 例焦虑症患者，取得良好效果。

Herbal Formula Jie Yu Tang in Combination with Tuina and Acupuncture in the Treatment for Anxiety

Lin Yue Zheng

PhD Student, Zhejiang University of Chinese Medicine

Abstract: Anxiety disorder is a common-managed psychological disorder, categorically under TCM syndromes such as ZangZao, JingKong, palpitation, insomnia and Yu syndrome. It is mainly caused by YuFire and Phlegm heat to disturb heart Shen-mind; or disharmony between heart and kidney. Jie Yu Tang, has been applied to manage ten cases with anxiety, supplemented by Tuina and acupuncture, with satisfied effectiveness.

关键词：焦虑症，解郁汤，针灸，推拿。

焦虑症，又称为焦虑性神经症，是神经症这一大类疾病中最常见的一种，以焦虑情绪为主要特征。可分为慢性焦虑，即广泛性焦虑（generalized anxiety）和急性焦虑，即惊恐发作（panic attack）两种形式。焦虑症主要表现为无明确客观对象的紧张担心，坐立不安，还有植物神经功能失调的症状，如心悸、手抖、出汗、尿频以及运动性不安。患者常无缘无故，没有明确对象和内容的焦急、紧张和恐惧，似乎某些威胁即将来临，但病人自己却说不出究竟存在何种威胁或危险。焦虑症会影响人体的免疫系统

的功能，从而引起各种其他疾病，如慢性咽喉炎、口腔溃疡；肠易激综合症、结肠炎、慢性胃炎；神经性头痛、头晕、头昏、失眠、多梦；多汗、虚汗、盗汗、怕冷、怕风；心脏神经官能症、胃神经官能症；脖子肌肉僵硬、关节游走性疼痛、幻肢痛；记忆差、反应迟钝、神经衰弱；早泄、易感冒、免疫力低下等。焦虑症属于中医学‘脏躁’（1）、‘惊恐’、‘心悸’、‘不寐’、‘郁证’、‘惊悸’等范畴。其发生多因情志不舒，过度紧张，肝郁化火，灼津成痰，以致郁火、痰热上扰神明；或思虑过度，心肝血虚，

或房劳过度，屡犯手淫，导致肝肾亏虚，阴不制阳，阴阳失去平衡所致。本人用自拟的解郁汤为主，并配合针灸和推拿疗法，治疗10例焦虑症患者。结果：治愈6例，好转3例，无效1例。现具体介绍如下：

1. 解郁汤

来源：该方由逍遥散化裁而来。

组成：柴胡1g，当归1g，茯苓0.5g，白芍1g，白术1g，郁金1g，炙甘草1g，生姜1g，薄荷1g，龙胆草1.5g，黄芩1g，法半夏1g。

用法：以上为应用中药浓缩粉的1日用量，共12克。一般早上6克，晚上6克，开水冲服。15天为一疗程。饭前服用，如有胃病者宜饭后服。

方解：逍遥散出之宋代《太平惠民和剂局方》，由柴胡、当归、芍药、白术、茯苓、炙甘草、生姜和薄荷组成〔1〕。方中柴胡和解表里、疏肝解郁，当归补血柔肝，白术健脾益气，茯苓健脾安神，煨生姜辛散解郁，薄荷辛散滞气，炙甘草调和诸药。八药相辅相成，有养血健脾，疏肝解郁之功效。中医常以此方作为治疗肝郁脾虚诸证〔2〕。解郁汤是在逍遥散的基础上，再加郁金以疏肝利胆，清心解郁；加龙胆草以清肝火而抗焦虑，张恩勤老师曾用龙胆草单味治好一位阿拉伯王子的焦虑症；还加黄芩泻肺火，除烦热；加法半夏祛痰而安神。诸药配伍，有解郁火、除痰热、定神明之功用，能很好地缓解焦虑症的紧张和过度担心情绪。

2. 针灸治疗

主穴：水沟、间使、太冲、太溪、神庭、四神聪。

配穴：伴有心悸窒息感，加内关或膻中；惊恐发作，心烦坐卧不宁，加神门；失眠加安眠穴、三阴交；胃肠不适，加中脘、足三里。操作：用毫针，平补平泻法。留针35分钟，加灸法或神灯。

处方释义：水沟（3）、间使为治癫效穴，如《灵光赋》曰“水沟、间使治邪癫”，即有抗抑郁和抗焦虑的功能。间使为手厥阴心包经之穴，配合四神聪，有宁心开窍和抗焦虑的作用。太冲解郁去肝火，镇静安神，尤其适合于焦虑患者烦躁易怒者。神庭配太溪，益肾水，安心神，对焦虑患者的失眠有效。诸穴合用，对焦虑症的焦虑情绪有良好的疗效。

3. 推拿治疗

手法：一指禅，点，按，摩，推，拿，揉，滚，扣，拍等。

取穴：神庭、四神聪、中脘、气海、关元及背部华佗夹脊穴等。

焦虑日久的患者常发现背部有压痛点及筋结，应以手法慢慢松解开为佳。推拿强调神的作用，医者首先通过调身、调息、调心三个方面，放松身心，使身心宁静、气血和谐。然后将注意力集中到患者身上，通过手摸心会，诊查相关穴位、经络等，快速

找到‘病之所苦’。通过柔和的推拿手法，对痛点及筋结部位进行持久有效的刺激，达到调理膻穴，疏通经络，松解经筋的作用，使患者气血调畅，脏腑功能恢复正常，从焦虑症状态中解脱出来。

4. 病案举例

初诊日期：02/03/2018，XXX，女性，38岁。焦虑、紧张5年，加重2年。患者于5年前因为工作压力大，开始出现焦虑、紧张，并伴有有时心跳加速、记忆力下降、难以集中注意力、时常感到担忧紧张、心烦意乱、焦躁不安、失眠，近两年进行性加重，时常伴有心慌惊悸，进而失去工作能力。去医院检查，诊为焦虑症，并给予抗焦虑药物治疗，但效果不好，诸症仍在折磨她，并伴有颈、背部酸痛不适。后在朋友推荐下来来我诊所就医。查体：患者面容憔悴、神情紧张、体型消瘦，头部、颈及背部有痛点及筋结，舌质红苔焦黄，脉弦。中医诊断：肝经郁热。治疗：方用解郁汤：柴胡1g，当归1g，茯苓0.5g，白芍1g，白术1g，郁金1g，炙甘草1g，生姜1g，薄荷1g，龙胆草1.5g，黄芩1g，法半夏1g。用法：以上为中药浓缩粉的1日用量，共12克，嘱早上6克，晚上6克，开水冲服，饭前服用。同时配合针灸及推拿治疗，每周2次。治疗3次后，睡眠改善，颈、背部酸痛消失，焦虑、紧张情绪有所缓解。治疗10次后，焦虑、紧张情绪明显缓解，心慌惊悸消失，精神面貌改观，舌苔由焦黄转淡稍黄，同时减服西医的抗焦虑药物。治疗6个月后，患者面貌焕然一新，原来折磨她的各种症状基本消失，信心倍增，并完全停服西医抗焦虑药，并重返工作岗位。近日电话追访患者健康。

小 结

焦虑症属中医‘脏躁’、‘惊恐’、‘心悸’、‘不寐’和‘郁症’等范畴。多因情志内伤，肝郁气滞，郁久化火，熏灼津液为痰，痰蒙心窍，内扰心神所致。本人以逍遥散为基础，加龙胆草等，用自拟‘解郁汤’，配合针灸和推拿，来治疗焦虑症，取得了良好效果。值得注意的是，焦虑症在治疗初期常有病情反复发作的现象。所以应建议病人不要过早停止治疗，一般要坚持6-12个周。

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糖尿病动眼神经麻痹案

陈丽 (伦敦中医孔子学院 外派教师)

患者李某,女,64岁,退休。于2018年2月11日就诊。主诉:发现血糖高16年,右眼睑下垂4天。现病史:患者16年前因体检发现血糖高(空腹血糖 9.1mmol/L),伴多饮,无明显多尿、多食不适,目前使用诺和锐30针剂(早38U晚28U餐前30分钟皮下注射),加用二甲双胍缓释片 0.5g 2次/日,阿卡波糖片 50mg 3次/日。患者4天前无明显诱因出现右侧眉弓处疼痛,疼痛为持续性胀闷痛,自行按摩后(用力较大,自诉用右手拇指自眉头向眉尾按压约100次左右)出现右眼睑下垂,无额纹消失,无呛咳,无四肢麻木。

遂来我院,门诊以“2型糖尿病右眼睑下垂”收入我院内分泌科。自起病以来,患者精神饮食尚可,睡眠欠佳,大便稀,夜尿频多,体力下降,体重无明显改变。既往史:高血压病史12余年,血压最高达 $180/110\text{mmHg}$,现口服“左旋氨氯地平片 2.5mg qd”,血压控制尚可;冠心病史4年,含服速效救心丸可缓解,现口服阿司匹林片 100mg qd;曾有晕厥病史,带状疱疹病史;白内障病史2年;2002年曾行直肠脱肛手术;对青霉素过敏。否认糖尿病家族史,否认传染病史,否认输血史。查体: $T36.3^{\circ}\text{C}$ $P110$ 次/分 $R18$ 次/分 $BP164/81\text{mmHg}$,神清,右侧眼睑下垂,口角无歪斜,双肺呼吸音清,心律齐,腹软,无压痛及反跳痛,双下肢胫前皮肤有大小不一的色素沉着皮疹,双下肢无水肿,足背动脉搏动可。诊断:1. II型糖尿病 2. 高血压病 III级 极高危组 高血压性心脏病 3. 冠心病 心功 II级 4. 白内障 5. 右眼睑下垂原因待查。治疗:入院后予控制血糖、营养神经、改善循环、降压及对症支持治疗。

2月12请眼科会诊,检查:右眼视力0.5,左眼视力0.5,右眼眼睑下垂完全遮盖右眼,完全睁不开,右眼外斜,左转上转明显受限,双眼角膜透明,晶体混浊明显,小瞳孔眼底窥不清,指测眼压Tn小瞳孔眼底窥不清,诊断:1. 右动眼神经麻痹 2. 并发性白内障。处理意见:患者动眼神经麻痹为糖尿病所致,眼科暂时无特殊处理,可加用营养神经药物。定期眼科门诊检查。2月13日眼眶MRI结果回报无异常。

请神经内科会诊,会诊意见及建议:患者诉右眼睑下垂已近一周,左眼无疼痛不适,无肢体麻木乏力,无头痛头晕,既往有糖尿病病史。查体:神志清楚,语言流利,双侧瞳孔等大等圆,直径 3mm ,右侧对光反射稍迟钝,左侧对光反射灵敏,右眼呈外展位,内收受限,右眼睑下垂,左侧眼球运动正

常,双侧鼻唇沟对称,伸舌居中,四肢肌力肌张力正常,双侧腱反射正常,感觉及共济运动无异常,双侧巴氏征阴性。颈软,克氏征阴性。诊断:右侧动眼神经麻痹待查:糖尿病周围神经病?后交通动脉瘤?重症肌无力?痛性眼肌麻痹?治疗:建议完善头部CTA、甲功,新斯的明试验(新斯的明针 1mg 肌肉注射,观察20分钟-1小时左侧眼睑下垂有无缓解),给予营养神经、改善微循环治疗。随后遵医嘱查甲状腺功能未见异常。新斯的明实验阴性,排除重症肌无力。患者拒绝行头部CTA检查。1周后患者右眼睑下垂未见好转。

2月21日请中医针灸科会诊,刻下症见:双眼眼眶周围黑色,右眼睑下垂,右眼外展位,右眼内收受限,无眼震,无右侧口角歪斜,舌红苔白腻,脉弦滑。眼眶MR未见异常,既往糖尿病病史及按压病史。诊断:中医诊断:睑废(右) 西医诊断:动眼神经麻痹(右) 治疗:针刺治疗,取穴:攒竹、阳白、丝竹空(向鱼腰穴透刺),四白、合谷(同侧)。雨禾牌TPD灯照射右侧眼部,热度以患者耐受为度。电针1组(上海华谊G6805-2A型低频电子脉冲治疗仪):眼部四个穴位交替断续波,以患者耐受为度。留针30min,每日1次,10次为一疗程,10日后患者出院,见眼睑下垂较前明显改善(平视时可见右眼白睛,用力上抬可见瞳孔),出院后于门诊继续行针刺治疗,因患者疼痛耐受差,改为一周3次治疗,二周后患者平视时右眼平视较左侧稍差,用力上抬与左侧基本一致,右侧眼球运动可,无复视,继续巩固治疗2周,患者右侧眼睑平视及上抬时与左侧基本一致,眼球运动可。治疗期间嘱患者控制血糖,继续口服甲钴胺片营养神经治疗,早晚二次热毛巾湿敷右眼,20min/次。一个月后复诊未见反复。

按语:临床上动眼神经麻痹较多见,其原因多数与神经系统疾病有关,另外与单纯眼部疾病、糖尿病、高血压、后交通动脉瘤等均有相关性^[1]。所以多在神经内科、神经外科、眼科等科室见到此病。糖尿病性周围神经病是糖尿病最常见并发症之一,但糖尿病引起的动眼神经麻痹临床上较少见,其动眼神经损害的主要特点:上睑下垂,复视为首发表现^[2]。临床上针灸治疗动眼神经麻痹取得了很好的疗效^[3]。本案例为针刺治疗糖尿病性动眼神经麻痹提供了很好的例证与补充。

有报道^[4]对糖尿病周围神经病变以动眼神经麻痹为首发症状的发病机制做了相关研究, 原因为血糖升高的病人易产生非酶促组织蛋白糖基化物质, 该物质破坏外周神经髓鞘结构, 致轴索微丝微管蛋白糖基化, 导致轴索变性。另外糖尿病造成的微血管病变使周围神经缺血缺氧, 血糖增高肌醇减少、NKATP 酶活性减低以及渗透压和山梨醇通路障碍可造成或加重周围神经髓鞘和轴索变性坏死。故治疗上多采取控制血糖, 改善循环, 营养神经治疗^[5], 并取得很好疗效。本病案按照上诉治疗方法后症状未见好转, 加入针灸治疗后病情得到很好的控制, 下面就该病案做相关分析。

动眼神经麻痹中医上称眼睑下垂, 有“睢目”“睑废”之称。从《黄帝内经》中以“太阳为目上纲, 阳明为目下纲。”以目纲的功能障碍来认识本病。《诸病源候论》“其皮缓纵, 垂覆于目。”认为眼睑皮肤松弛导致该病, 后世医家逐渐抛弃以上认识, 认识到眼睑下垂是由眼睑的运动功能障碍所导致。到现代眼睑下垂已经被认为是一种独立的疾病。有学者^[6]将眼睑下垂的中医病因归纳为三个方面: 筋热弛缓 目纲失司、脾胃气虚 升阳无力、气血亏虚 风邪客睑。

笔者认为该病案隶属于气血亏虚 风邪客睑的范畴。眼部的运动与经筋相关。《灵枢·经筋》有记载“太阳为目上纲, 阳明为目下纲”。两纲的运动促成眼部正常的运动。此外, 眼与气血的关系密切, 《灵枢》: “十二经脉, 三百六十五络, 其血气皆上于面而走空窍。其精阳气上走于目而为睛”, 《素问》: “诸脉者, 皆属于目”。说明眼是一个血脉充盈的器官, 因此眼的生理功能、病理变化与气血的盛衰密切相关。笔者认为该病案患者有长达16年的糖尿病病史, 长期血糖控制一般, 直接导致糖尿病周围神经病变的发生, 为机体正气不足之征象。此外其眼周皮肤长期黑色, 为气血不足, 脉络空虚之征象。因大力按摩加剧了眼周局部气血不足。此时卫外不固, 风邪乘虚侵入面部经络, 眼部气血痹阻, 眼睑经筋功能失调, 导致上睑闭合不能的发生。

治疗上采用祛风通络, 疏调经脉的治疗方法, 促进经筋气血健运, 眼睑开合自如。选穴及手法: 合谷为泻法, 合谷为阳明经多气多血经穴, 可祛除阳明经络之邪气; 攒竹、阳白、四白、丝竹空; 阳白为局部取穴, 采用补法, 可改善眼周气血, 濡养经筋。结合热敷协助祛风通络, 治愈疾病。取穴较少, 治疗痛苦小, 效果佳, 为临床上针灸治疗糖尿病后动眼神经麻痹提供了很好的例证。

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Dandelion exerts anti-cancer effects in triple negative breast cancer (TNBC) by killing tumour cells via multiple cell death pathways

Qiong Di Wu^{1,2,3,*}, Shulan Tang⁴, Siobhan Blankson², and Peijuan Wang³

¹Q&D Chinese Acupuncture and Herb Clinic, Cork, Ireland

²Department of Academic Surgery, University College Cork, Cork University Hospital, Cork, Ireland

³Department of Gynaecology and Obstetrics, Jiangsu Province Hospital on Integration of Chinese and Western Medicine, Nanjing University of Traditional Chinese Medicine, Nanjing, China

⁴Shulan College of Chinese Medicine, Manchester, UK

*Correspondence: Qiong Di Wu, Q&D Chinese Acupuncture and Herb Clinic, Oxfordville, Wilton, Cork T12 YK06, Ireland, E-mail: qiongdwu@gmail.com

Abstract

Triple negative breast cancer (TNBC) is particularly aggressive with the worst prognosis, and currently, chemotherapy is the only option for treatment of TNBC, which has linked with severe drug toxicity and side effects. Recently, dandelion, the plant of the genus *Taraxacum*, has proved to exhibit anti-cancer activities in different types of malignancies. In the present study, we investigated whether dandelion root extract (DRE) exerts anti-cancer properties in TNBC by killing cancer cells via activation of multiple cell death pathways. Treatment of primary and metastatic human TNBC cell lines BT-20 and MDA-MB-231 with DRE led to cell death in both a dose- and time-dependent manner. Furthermore, DRE at low concentrations of 1.0, 2.5, and 5.0 mg/ml preferably induced cell apoptosis and autophagy, whereas DRE at high concentrations of 5.0, 10, and 20 mg/ml caused cell necrosis. These results demonstrate that DRE kills primary and metastatic TNBC cells via multiple cell death pathways, at least by induction of cell apoptosis, necrosis, and autophagy in these TNBC cells.

Introduction

Breast cancer is the commonest form of cancer in women, accounting for 29% of all new cancer cases (Siegel et al., 2015; Torre et al., 2012). Furthermore, breast cancer is the second leading cause of cancer-related death among women worldwide, responsible for 15% of total cancer-related deaths (Siegel et al., 2015; Torre et al., 2012). Triple negative breast cancer (TNBC), characterised by lack of estrogen receptor (ER), progesterone receptor (PR), and human epidermal growth factor receptors type 2 (HER2), accounts for approximate 10–20% of invasive breast cancers (Foulkes et al., 2010; Kumar et al., 2016). This subtype of breast cancer is particularly aggressive and associated with the worst prognosis after its metastasis (Foulkes et al., 2010; Kumar et al., 2016). Unfortunately, in contrast to ER-positive/PR-positive and HER2-positive breast cancer subtypes, there is currently no efficient targeted molecular therapy for TNBC (Crown et al., 2012). Consequently, combined chemotherapy remains the only recommended treatment regimen, with the most commonly used combinations of anthracyclines, cyclophosphamide, and taxanes for TNBC in the clinical setting (Andre et al., 2012; Bhattacharya et al., 2017). However, the overall response rates of TNBC to this combined chemotherapy are poor with severe drug toxicity and side effects.

Therefore, it is urgent for further research to develop new alternative medications for effective treatment of TNBC, the most aggressive and deadly breast cancer subtype.

Taraxacum mongolicum, commonly known as dandelion, is the plant of the genus *Taraxacum* and has been used for centuries in Chinese herb medicine to treat various diseases including diarrhoea, digestive diseases, and more serious ailments like hepatitis and anorexia, based on dandelion-associated choleric, diuretic, antioxidant, anti-inflammatory, and hepato-protective properties (Mingarro et al., 2015; Schutz et al., 2006; Yarmell et al., 2009). Recently, dandelion extracts have been shown to display anti-cancer activities in different types of malignancies including pancreatic cancer (Ovadjie et al., 2012a), colorectal cancer (Ovadjie et al., 2016), melanoma (Chatterjee et al., 2011), leukemia (Ovadjie et al., 2011; Ovadjie et al., 2012b), and breast cancer (Sigstedt et al., 2008). The anti-tumour effect of dandelion, in particular the dandelion root extract, has been linked to its induction of cell apoptosis, a programmed cell death in different type of tumours via activation of the death receptor-mediated extrinsic apoptotic pathway and caspase-8 (Chatterjee et al., 2011; Ovadjie et al., 2011; Ovadjie et al., 2012a, Ovadjie et al., 2012b).

In the present study, we hypothesised that dandelion root extract (DRE) exerts anti-cancer benefits in TNBC by killing tumour cells via activation of multiple cell death pathways, thus attenuating TNBC cell proliferation and growth. We selected two human TNBC cell lines, a primary BT-20 cell line and a metastatic MDA-MB-231 cell line, and treated them with different concentrations of DRE for various time periods. Tumour cell viability, apoptosis, necrosis, and autophagy after treatment with DRE were assessed and analysed. Our results demonstrate that DRE treatment induces cell death in BT-20 and MDA-MB-231 cells in both a dose- and a time-dependent manner, which is associated predominantly with DRE-induced multiple cell death forms including cell apoptosis, necrosis, and autophagy.

Materials and Methods

Preparation of DRE

DRE was prepared based on a previously published protocol (Ovadje et al., 2012a) with some modifications. Briefly, dried dandelion roots purchased from Piping Rock Health Products (Ronkonkoma, NY, USA) were ground up using an impingement grinder (Moling-1000, Haina Electric Instruments Co. Ltd., Wuyi, China). After grinding, the dandelion root powder dissolved in distilled water (100 g DRE in 500 ml dH₂O) was extracted in boiling water on low heat for 1 h, filtered through a nylon mesh filter, and centrifuged at 10,000 ×rpm for 15 min. The resultant supernatants were further filtered through a 0.45 µm filter and followed by lyophilisation. The lyophilised DRE was reconstituted in PBS to a final stock solution at 100 mg/ml and then filtered through a 0.22 µm filter. The stock solution of DRE was further prepared in the respective culture medium to the desired concentrations.

Cultures of TNBC cell lines

Two types of human TNBC cell lines, a primary TNBC cell line BT-20 from the mammary gland and a metastatic TNBC cell line MDA-MB-231 derived from a metastatic site in the pleura were obtained from American Type Culture Collection (ATCC, Manassas, VA, USA). BT-20 and MDA-MB-231 cells were cultured in EMEM and DMEM, respectively, supplemented with 10% heat-inactivated fetal calf serum (FCS), penicillin (100 units/ml), and streptomycin sulphate (100 µg/ml), at 37°C in a humidified atmosphere with 5% CO₂ until reaching a sub-confluent monolayer. Sub-confluent cultures of BT-20 and MDA-MB-231 cells were harvested by trypsinization, resuspended in the respective culture medium, and adjusted to the desired cell concentrations for *in vitro* experiments. All culture medium and reagents for cell cultures were purchased from Invitrogen Life Technologies (Paisley, Scotland, U.K.). All other chemicals, unless indicated, were obtained from Sigma-Aldrich (St. Louis, MO, USA).

Assessment of cell viability after treatment with DRE

The harvested BT-20 and MDA-MB-231 cells were plated and cultured in 96-well cell culture plates (Sarstedt, Numbrecht, Germany) at 0.5–1×10⁴ cells/well for 12 h and further incubated with culture medium as the control or treated with DRE at increasing concentrations of 0.25, 0.5, 1.0, 2.5, 5.0, 10, and 20 mg/ml for 24, 48, and 72 h. At each time point, cell viability in each well was assessed using a MTT assay kit (Abcam, Cambridge, MA, USA) based on that the yellow MTT is converted to purple-coloured formazan crystals by viable cells and forms the basis of the viability detection. The absorbance of each well was measured using a Microtitre plate reader (Dynex Technologies Inc., Chantilly, VA, USA) at 570 nm wavelength and the optical density (OD) for each well was recorded. Cell viability in BT-20 and MDA-MB-231 tumour cells after treatment with DRE was calculated and expressed as the percentage (%) of cells incubated with PBS.

Measurement of cell apoptosis versus necrosis after treatment with DRE

The harvested BT-20 and MDA-MB-231 cells were plated and cultured in 12-well cell culture plates (Sarstedt) at 1–1.5×10⁵ cells/well for 12 h and further incubated with culture medium as the control or treated with DRE at increasing concentrations of 0.25, 0.5, 1.0, 2.5, 5.0, 10, and 20 mg/ml for 12, 24, and 48 h. At each time point, cell apoptosis and necrosis were assessed using a FITC annexin V and propidium iodide (PI) assay kit (BD Biosciences, San Jose, CA, USA). Cell apoptosis and necrosis were detected by FACScan analysis using CellQuest software (BD Biosciences) based on that cell apoptosis was quantified through binding of annexin V to externalised phosphatidylserine, whereas cell necrosis was simultaneously measured through binding of PI to fragmented DNA. Cell apoptosis and necrosis in BT-20 and MDA-MB-231 tumour cells after treatment with DRE were expressed as the percentage (%).

Assessment of autophagy induction after treatment with DRE

The harvested BT-20 and MDA-MB-231 cells were plated and cultured in 12-well cell culture plates (Sarstedt) at 1–1.5×10⁵ cells/well for 12 h and further incubated with culture medium as the control or treated with DRE at increasing concentrations of 0.25, 0.5, 1.0, 2.5, 5.0, 10, and 20 mg/ml for 12, 24, and 48 h. At each time point, induction of autophagy was assessed using a Cyto-ID autophagy detection kit (Enzo Life Sciences, Farmingdale, NY, USA) based on that a 488 nm-excitable green fluorescent detection probe which specifically fluoresces in autophagic vesicles and an increase in green signal indicates the accumulation of the probe within the cells arising from enhanced autophagic vesicles. Autophagy induction in BT-20 and MDA-MB-231 tumour cells after treatment with DRE was quantified by FACScan analysis using

CellQuest software (BD Biosciences) and expressed as the fold change over the control.

Statistical analysis

All data are expressed as the mean \pm SD. Statistical analysis was performed using the ANOVA or Mann-Whitney *U* test for all others with GraphPad software version 5.01 (Prism, La Jolla, CA, USA). Differences were judged to be statistically significant when the *p* value was less than 0.05.

Results and Discussion

DRE treatment causes cell death in TNBC cells in both a dose- and a time-dependent manner

We first examined whether treatment with DRE induces cell death in TNBC cells. Treatment of the primary TNBC cell line, BT-20, with increasing concentrations of DRE at 0.25, 0.5, 1.0, 2.5, 5.0, 10, and 20 mg/ml for 48 h led to significantly increased cell death with substantially reduced cell viability started from 1.0 mg/ml DRE ($p < 0.05$, $p < 0.01$ versus 0 mg/ml DRE-treated BT-20 cells) (Figure 1). Furthermore, DRE-induced cell death in BT-20 was DRE dose-dependent, as DRE at 1.0, 2.5, 5.0, 10, and 20 mg/ml caused 19%, 34%, 54%, 83%, and 91% BT-20 cell death, respectively, after treatment for 48 h (Figure 1). Similar results were also observed in a more aggressive metastatic TNBC cell line, MDA-MB-231, in response to DRE treatment, where treatment with DRE at 1.0, 2.5, 5.0, 10, and 20 mg/ml for 48 h resulted in marked cell death with reduced cell viability at 76%, 61%, 42%, 19%, and 11%, respectively, in MDA-MB-231 cells ($p < 0.01$ versus 0 mg/ml DRE-treated MDA-MB-231 cells) (Figure 1).

To further determine whether DRE-induced cell death in TNBC cells is also dependent on time periods of DRE treatment, we treated both BT-20 and MDA-MB-231 cells with DRE at 1.0, 2.5, and 5.0 mg/ml for various

or MDA-MB-231 cells treated with PBS (0 mg/ml DRE).

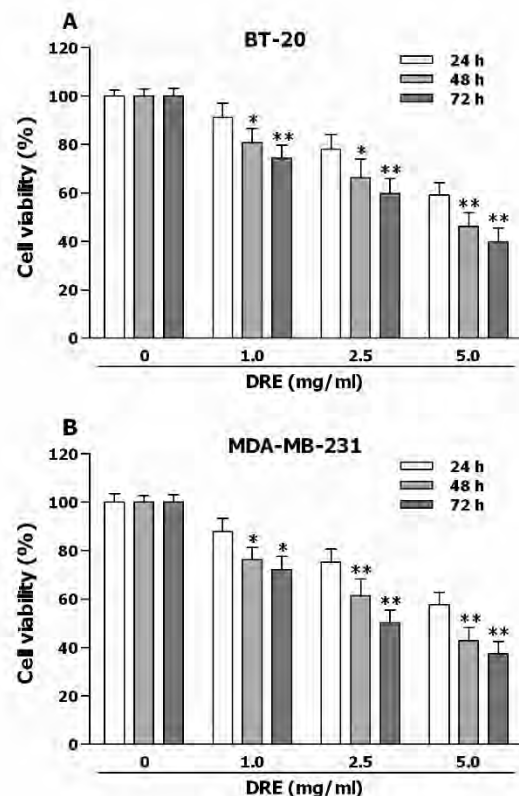


Figure 2. DRE induces cell death in TNBC cells in a time-dependent manner. Non-metastatic BT-20 cells (A) and metastatic MDA-MB-231 cells (B) were incubated with PBS as the control or treated with DRE at 1.0, 2.5, and 5.0 mg/ml for 24, 48, and 72 h. Cell viability was assessed using a MTT assay kit and expressed as the percentage (%) of cells treated with PBS. Data are mean \pm SD from three independent experiments in triplicate. * $p < 0.05$, ** $p < 0.001$ versus BT-20 or MDA-MB-231 cells treated with the indicated concentrations of DRE for 24 h.

time periods. Treatment of either BT-20 (Figure 2A) or MDA-MB-231 (Figure 2B) cells with DRE led to a time-dependent cell death with significantly more reduced cell viability at 48 and 72 h compared with that at 24 h at each dose of 1.0, 2.5, and 5.0 mg/ml DRE used ($p < 0.05$, $p < 0.01$ versus cell viability at 24 h). These results are consistent with previous reports where DRE dose-dependently and/or time-dependently induces cell death with diminished cell viability in human pancreatic cancer cell lines BxPC-3 and PANC-1 (Ovadge et al., 2012a), highly aggressive human colon cancer cell lines HT-29 and HCT116 (Ovadge et al., 2016), drug-resistant human melanoma cell lines A375 and G361 (Chatterjee et al., 2011), human chronic myelomonocytic leukemia cell line MV-4-11 (Ovadge et al., 2012b), ER-positive metastatic human breast cancer cell line MCF-7, and metastatic human prostate cancer cell line LNCaP C4-2B (Sigstedt et al., 2008).

DRE treatment induces cell apoptosis and necrosis in TNBC cells in a dose-dependent mode

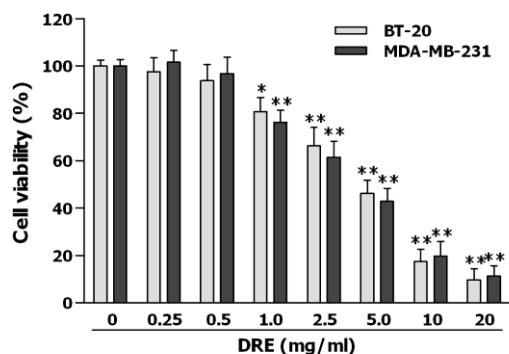


Figure 1. DRE induces cell death in TNBC cells in a dose-dependent manner. Non-metastatic BT-20 cells and metastatic MDA-MB-231 cells were incubated with PBS as the control or treated with DRE at 0.25, 0.5, 1.0, 2.5, 5.0, 10, and 20 mg/ml for 48 h. Cell viability was assessed using a MTT assay kit and expressed as the percentage (%) of cells treated with PBS. Data are mean \pm SD from three independent experiments in triplicate. * $p < 0.05$, ** $p < 0.001$ versus BT-20

It has been shown that dandelion is capable of inducing cell death in different types of tumours including pancreatic cancer (Ovadje et al., 2012a), colorectal cancer (Ovadje et al., 2016), melanoma (Chatterjee et al., 2011), and leukemia (Ovadje et al., 2011; Ovadje et al., 2012b), mainly by induction of cell apoptosis, a programmed cell death. We next assessed whether DRE-induced cell death in TNBC cells is via induction of cell apoptosis and/or cell necrosis. Treatment of either BT-20 or MDA-MB-231 cells with DRE for 24 h induced cell apoptosis started at 0.5 mg/ml DRE, and notably DRE-induced cell apoptosis reached the maximal levels at 2.5 mg/ml with 31% cell apoptosis in BT-20 cells and 28% cell apoptosis in MDA-MB-231 cells ($p < 0.01$ versus 0 mg/ml DRE-treated BT-20 and MDA-MB-231 cells) (Figure 3A).

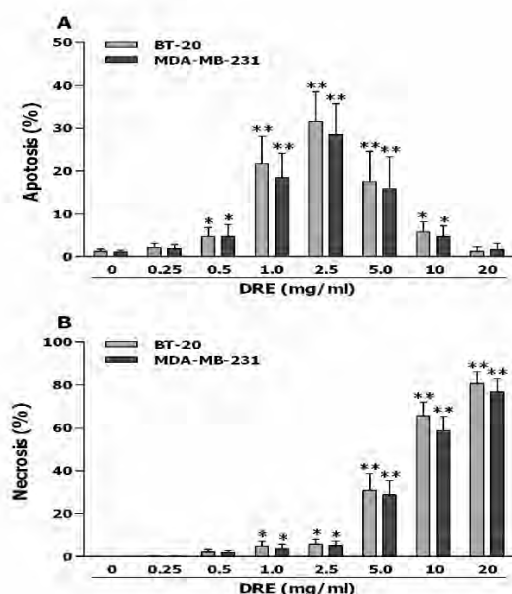


Figure 3. DRE treatment causes both apoptosis and necrosis in TNBC cells. Non-metastatic BT-20 cells and metastatic MDA-MB-231 cells were incubated with PBS as the control or treated with DRE at 0.25, 0.5, 1.0, 2.5, 5.0, 10, and 20 mg/ml for 24 h. Cell apoptosis (A) and necrosis (B) was assessed using a FITC annexin V and propidium iodide (PI) assay kit and expressed as the percentage (%). Data are mean \pm SD from three independent experiments in duplicate. * $p < 0.05$, ** $p < 0.001$ versus BT-20 or MDA-MB-231 cells treated with PBS (0 mg/ml DRE).

Surprisingly, DRE at higher doses of 10 and 20 mg/ml failed to induce cell apoptosis in both primary and metastatic TNBC cell lines (Figure 3A). Instead, DRE at 5 mg/ml resulted in substantially increased cell necrosis at 30% in BT-20 cells and 28% in MDA-MB-231 cells, with maximal induction of cell necrosis by DRE at 10 and 20 mg/ml in both primary and metastatic TNBC cell lines ($p < 0.01$ versus 0 mg/ml DRE-treated BT-20 and MDA-MB-231 cells) (Figure 3B). These results indicate that DRE at low concentrations preferably induces cell apoptosis, whereas DRE at high concentrations causes cell

necrosis.

DRE treatment leads to autophagy induction in TNBC cells

Recent studies have revealed that other cell death form such as autophagy induction is one of potential mechanisms by which anti-cancer agents cause tumour cell death (Sigstedt et al., 2008; Stendel et al., 2009). Induction of autophagy in cancer cells is a pro-death form and has been linked with another programmed cell death form, apoptosis, as both of them share the interconnected pathways and can be regulated by the same proteins (Rosenfeldt et al., 2011; Thorburn et al., 2008). In addition to inducing cell apoptosis, treatment with DRE at 2.5 mg/ml for 48 h led to a clear induction of autophagy in human pancreatic cancer cell line BxPC-3 (Ovadje et al., 2012a). Autophagy formation, together with apoptosis induction, were also found in human glioblastoma/astrocytoma cell lines LN-18, LN-229, and U-373 treated with taurolidine, a derivative of the semi-essential amino acid taurine with both anti-bacterial and anti-neoplastic properties (Sigstedt et al., 2008).

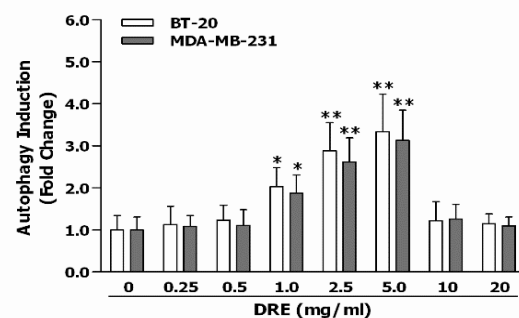


Figure 4. DRE treatment initiates autophagy induction in TNBC cells. Non-metastatic BT-20 cells and metastatic MDA-MB-231 cells were incubated with PBS as the control or treated with DRE at 0.25, 0.5, 1.0, 2.5, 5.0, 10, and 20 mg/ml for 24 h. Induction of autophagy was assessed using a Cyto-ID autophagy detection kit and expressed as the fold change over the control. Data are mean \pm SD from four independent experiments in duplicate. * $p < 0.05$, ** $p < 0.001$ versus BT-20 or MDA-MB-231 cells treated with PBS (0 mg/ml DRE).

Therefore, we further examined whether DRE-induced TNBC cell death is also through the autophagy formation. As shown in Figure 4, treatment of non-metastatic TNBC BT-20 cells with DRE at 1.0 mg/ml initiated autophagy induction, whereas DRE at 2.5 and 5.0 mg/ml led to further increases in autophagy induction ($p < 0.05$, $p < 0.01$ versus 0 mg/ml DRE-treated BT-20 cells). Similar results were also found in DRE-treated metastatic TNBC MDA-MB-231 cells, with initial induction of autophagy seen at 1.0 mg/ml DRE and further enhanced autophagy formation after treatment with 2.5 and 5.0 mg/ml DRE ($p < 0.05$, $p < 0.01$ versus 0 mg/ml DRE-treated MDA-MB-231 cells) (Figure 4). Of note, DRE at 10 and 20 mg/ml was

unable to induce autophagy in both BT-20 and MDA-MB-231 cells, consistent with the capability of DRE in mediating cell apoptosis.

Conclusion

In summary, our results demonstrate that DRE treatment induces cell death in either non-metastatic or metastatic TNBC BT-20 and MDA-MB-231 cells in both a dose- and time-dependent manner. Furthermore, DRE-induced cell death is via multiple cell death pathways, at least by induction of cell apoptosis, necrosis, and autophagy in these TNBC cells. Nevertheless, Data obtained from the present study will establish an important platform for future clarification of therapeutic effects of DRE on TNBC both in an *in vivo* animal model and in the clinical setting.

Footnotes

Conflict of interest

The authors declare that they have no conflict of interest.

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简述《内经》生命人体的三大调节系统

徐广文 伦敦

摘要：《内经》有关生命人体调节的论述见于《素问》及《灵枢》诸篇中，生命人体三大调节系统包括经络调节系统、脏腑调节系统、腠理三焦调节系统。

关键词：黄帝内经 经络调节系统 脏腑调节系统 腠理三焦调节系统

生命人体的调节是通过经络、脏腑和腠理三焦三大调节系统来实现的。《内经》对经络、脏腑、腠理三焦调节有着完整的论述。简述于下：

一. 经络调节

经络是生命人体的重要调节系统。如《灵枢·本藏》：“经脉者，所以行血气而营阴阳，濡筋骨，利关节者也。”《灵枢·脉度篇》：“阴脉荣其脏，阳脉荣其腑，如环之无端，莫知其纪，终而复始，其流溢之气，内溉脏腑，外濡腠理。”《灵枢·海论篇》：“夫十二经脉者，内属于脏腑，外络于肢节。”《灵枢·邪气脏腑病形》：“十二经络，三百六十五络，其血气皆上于面而走空窍。”^[2] 手少阴、足厥阴、足太阴、足少阳、足阳明之经别，循目系入脑；足太阳、足少阳、足阳明、手太阳、手少阳的经筋皆循行于目，环孔窍与脑连系。

《黄帝内经》上述诸论说明：经络出入表里，内络属脏腑，外连四肢百骸，皮肉筋脉，上汇头面，循系于五官，入络于脑。经络是运行和调节全身气血，调节阴阳、脏腑、五官；传导信息；联络脏腑肢节，沟通上下内外，调节体内各部分功能的通路。通过经络在全身有规律的循行和错综复杂的联络交会，把人体的五脏六腑、四肢百骸、五官九窍、皮肉筋脉等组织器官联结成一个有机的统一整体。故经络是生命人体最大的调节系统之一。

二. 脏腑调节

《灵枢·本藏篇第四十七》：“人之血气精神者，所以奉生，而周于性命者也。”《灵枢·本藏》：“五藏者，所以藏精神血气魂魄者也。”《灵枢·本神》：“血、脉、营气、精神，此五脏之所藏也。”《灵枢·大惑论》：“目者，五脏六腑之精也，营卫魂魄之所常营也，神气之所生也。”《灵枢·邪客》：“心者，五脏六腑之大主，精神之所舍也。”《素问·调经论篇第六十二》：“皆生于五脏也。夫心藏神，肺藏气，肝藏血，脾藏肉，肾藏志，而此成形。志意通，内连骨髓，而成身形五脏。五脏之道，皆出于经隧，以行血气。”《素问·宣明五气篇》：“五脏所主：心主脉，肺主皮，肝主筋，脾主肉，肾主骨。是为五主。”《素问·阴阳应象大论》：“肝主目，心主舌，肺主鼻，脾

主口，肾主耳。”等。

《内经》的生命整体观，认为人体以五脏为中心，五脏的脏与脏，脏与腑之间的阴阳、营卫、气血、津液、精气等，相互联系、相互制约、相互作用、相互调节。脏腑、经脉、五官九窍、皮肉筋骨、四肢百骸等紧密联系。在人体生命活动的过程中，形成一个整体调节系统^[5]。所以，脏腑主导着人体的整个生命活动过程的物质和能量化生和物质和能量调节，故脏腑调节是生命人体最大的调节系统。

三. 腠理三焦调节

腠理三焦的主要生理调节功能如下：

1. 运行水谷，生化气血

如《素问·六节藏象论》说：“三焦……仓廪之本，营之居也。”

《素问·六节藏象论篇》：“五味入口，藏于肠胃，味有所藏，以养五气，气和而生。”

《难经》：“三焦者，水谷之道路，气之所终始也。”

《素问·六节藏象论篇》：“脾、胃、大肠、小肠、三焦、膀胱者，仓廪之本，营之居也，名曰器，能化糟粕，转味而入出者也。”

《灵枢·决气篇》曰：“中焦受气，取汁变化而赤，是谓血。”

《难经》亦持此说，如三十一难：“中焦者，在胃中脘，不上不下，主腐熟水谷。”

《内经》云：“中焦亦并胃中，……此所受气者，泌糟粕，蒸津液，化其精微，上注于肺脉乃化而为血，以奉生身。”

2. 气化和调节津液的场所

《灵枢·脉度》：“流溢之气，内溉脏腑，外濡腠理。”王冰注：“腠，为津液渗泄之所。”

《素问·灵兰秘典论》曰：“三焦者，决渎之官，水道出焉。”

《灵枢·决气》：“津脱者，腠理开，汗大泄。”津液循腠理，腠理开则汗出。

《素问·六节藏象论篇》：“五味入口，藏于肠胃，

味有所藏，以养五气，气和而生，津液相成，神乃自生。”

《灵枢·营卫生会篇》：“下焦者，别回肠，注于膀胱而渗入焉。故水谷者，常并居于胃中，成糟粕而俱下于大肠，而成下焦。渗而俱下，济泌别汁，循下焦而渗入膀胱焉。”

《灵枢·本藏》：“肾合三焦膀胱，三焦膀胱者，腠理毫毛其应。”

说明腠理三焦是气化津液的场所和津液运行的通道。三焦生化和气化的津液由腠理三焦运行于周身，内至脏腑，外达肌肤，以濡养脏腑和周身肌肤。

3. 调节诸气的升降出入

腠理三焦通行元气于全身，是气机升降出入的通道，又是气化的场所，故有主持和调节诸气，总调全身气机和气化的功能^[5]。

如《灵枢·脉度篇》曰：“气之不得无行也，如水之流、如日月之行不休。故阴脉荣其藏，阳脉荣其府，如环无端，莫知其纪，终而复始。其流溢之气，内溉脏腑，外濡腠理。”

《素问·玄机原病式》云：“人之眼、耳、鼻、舌、身、意，神识能为用者，皆由升降出入之通利也。”三焦上通五官七窍^[3] 三焦“清阳出上窍”。

《难经·营卫三焦第四》中说：“三焦者，水谷之道路，气之所终始也”，“三焦者，原气之别使也，主通行三气，经历五脏六腑。”（三气指宗气、营气和卫气）。

《难经》：“所以腑有六者，谓三焦也，有原气之别焉，主持诸气。”“腑者，阳也。三焦行于诸阳，故置一俞，名曰原。腑有六者，亦与三焦共一气也。”“五脏俞者，三焦之所行，气之所留止也。”

《古本难经阐注》：“三焦者，水谷之道路，气之所终始也。”

《中藏经》认为：“三焦……总领五脏六腑、营卫、经络、内外左右上下之气也；三焦通，则内外左右上下皆通也，其于周身灌体，和内调外，荣左养右，导上宣下，莫大于此者也。”

4. 调节元气卫气，调节全身防御

腠理之卫气通汇元气，散胸腹。中焦脾胃为营卫、气血、津液生化之源。上焦宣发输布卫气，津液于腠理。卫气，津液行腠理，以温润肌肤，增强皮肤抗御外邪的作用。而“卫出下焦”，是元气出下焦，行腠理为卫气，故元气为卫气之源泉。元气卫气是人的正气，“正气存内，邪不可干”。故元气卫气是人的防御之气，元气卫气调节人体内外防御系统。腠理三焦是津液、营血、卫气、元气的气化场所和运行通道。所以，腠理三焦调节全身防御^[5]。

如：《灵枢·本脏》：“卫气者，所以温分肉，充皮肤，肥腠理，司开阖者也。”“卫气和则分肉解利，皮肤调柔，腠理致密矣。”腠理致密则邪不能入。

《灵枢·百病始生》曰：“是故虚邪之中人也，食

欲皮肤，皮肤缓则腠理开，开则邪从毛发入。”

《灵枢·百病始生》：“卫出下焦”。卫气根源于下焦，是元气出下焦，行腠理为卫气，故元气为卫气之源泉^[3]。

《金匱要略·脏腑经络先后病》曰：“腠者，是三焦通会元真之处，为血气所注。”

《灵枢·百病始生》曰：“是故虚邪之中人也，食欲皮肤，皮肤缓则腠理开，开则邪从毛发入。”

明·孙一奎《医旨绪余》中说：“卫气者，为言护卫周身……不使外邪侵犯也。”

《任继学经验集》认为“肌腠与膜原表理互用”，说：“膜原在人体肌表之里，肌肉之外，以腠为用，以小络、毛脉、孙络、结络、缠络相通，以脂膜相连，贯连其中，行气血，营阴阳，布营卫为防御之屏障。有此屏障，人之机体，方能固正守内，营固脉，卫护外，邪不能犯，为无病之躯。”

5. 调节体温

腠理三焦是津液、卫气、元气生成的气化场所和运行通道。津液如同血液，润养肌肤。腠理三焦调节津液和卫气运行，津液出于汗孔为汗液。汗液的排泄有调节体温的作用。卫气调节腠理，司汗孔的开合。元气为卫气之源泉。一是元气出下焦，行腠理而化为卫气，使卫气充足，则营卫调和，汗孔开合有度，调节体温正常。二是津液通过腠理三焦输布于皮肤皮毛，以润养之，保持良好的皮肤功能。而元气卫气属阳，津液属阴，二者阴阳相调，以调节正常体温^[5]。

如《灵枢·决气篇》曰：“腠理发泄，汗出溱溱，是谓津。”

《素问·宣明五气篇》：“五脏化液，心为汗。故后世有汗为心液的说法。汗为津液所化，‘阳加于阴，谓之汗’；

《素问·举痛论》：“炅则腠理开，荣卫通，汗大泄，故气泄。”

《素问·经脉别论篇》：“惊而夺精，汗出於心；持重远行，汗出于肾，疾走恐惧，汗出於肝；摇体劳苦，汗出于脾。”说明汗液的排泄，不但以腠理的开阖调节为主，而且与五脏的调节关系密切。

说明腠理之卫气调节汗孔的排汗量，能调节体温。汗出多为阳热，致腠理汗孔开，津液外泄，散发热气，可使体温下降。而腠理汗孔的开合，汗液的调节与五脏，和阴阳、营卫、元气、气血、津液的整体调节作用密切。阴阳平衡，营卫调和，元气充足，津血充盈，五脏调和，腠理通调，汗孔开合有度，才能保持正常的体温。^[5]

6. 调节呼吸

“口鼻为气之门户”，腠理三焦上出口鼻，外达周身汗孔^[5]。口鼻呼吸，吐故纳新，调节清浊气体交换。汗孔为腠理之窍^[5]；肺为呼吸之橐籥。肺合皮毛，皮毛上的汗孔有呼吸吐纳之功。如《读医随笔·论

喘》说：“凡人之气，由口鼻呼吸出入者，其大孔也；其实周身八万四千毛孔，亦莫不从而嘘噓。”《存存斋医话稿》：“遍身毛窍，俱暗随呼吸之气以为鼓伏。”说明肺和腠理三焦调节口鼻和皮肤的呼吸。腠理三焦为元气和津液的运行通道。三焦之元气和津液通过腠理，内至脏腑，外达肌肤，以发挥其温养濡润作用，并保持人体内外之气的不断交流^[6]。

7. 调节空间津气 净化生命机体

根据《内经》：“人与天地相应”，和“人与天地相参”的自然观，自然界有天地之空间，而万物生生不息。同样，人体有腠理三焦之生命空间，则生命生生不息^[6]。

如：《素问·阴阳应象大论篇》曰：“六经为川，肠胃为海，九窍为水注之气。以天地为之阴阳，阳之汗，以天地之雨名之；阳之气，以天地之疾风名之。”王冰注：“夫人汗泄于皮肤者，以天地之雨名之；阳之气，以天地之疾风名之。”人体的津汗，就好象天地间的雨；人之气，就好象天地间的风气（气的流动）。人体“六腑象天”，三焦者“六腑之大孤府”“一腔之大府也”，为人体之“天”也。腠理通三焦^[5]，则腠理三焦皆为人体之“天”也。故腠理三焦，如同天地之空间。腠理三焦运行诸气，津液升降出入，如同自然界风气，云雾，雨水升降流通一样。腠理三焦的诸气，津液运行，输布循环，如同自然界的雨水空气循环流动。阳光蒸发地面水分上升为云雾，云雾下降则为雨水，灌溉滋润大地，则万物生长。空气的流动，推动云雾和水气流动，无处不到，不但湿润空气和大地，滋养万物，而且净化了空气^[6]。

人体的腠理三焦“空间”，是气化的场所；是诸气、津液升降出入的通道。三焦的气化作用如同自然界的阳光。三焦气化水谷精微生成的营卫、气血、

津液、元气，通过腠理三焦的通道，使津气“若雾露之溉”，运行输布于全身，外温润肌肤皮毛，内濡养脏腑、筋骨、骨节、脊髓和脑窍。腠理气化，则卫气调节汗孔开阖，使汗液浊气从汗孔渗出；三焦气化，使浊气从肺口鼻呼出，尿液糟粕和矢气由二阴排出，从而净化人体。所以，天地空间和人体空间（腠理三焦）极为相似，都主要是“气，水”的调节运行，输布循环^[6]。

综上所述，三焦是生化营卫、气血、津液、精髓的场所。腠理三焦是调节卫气、元气、津液运行的通道；腠理三焦上出口鼻，下出二阴，外达肌肤汗孔，内纳五脏六腑，贯脊通脑，通行于周身，无处不到^[6]。腠理三焦调节卫气、元气、津液升降出入，主调诸气和气化，总调全身气机和水液气化的功能；腠理三焦调节体温、调节防御、调节呼吸、净化机体。所以腠理三焦是生命人体最大的调节系统之一。

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Brief Discussion on Three Major Life Regulating Systems of Human Body in Huangdi's Internal Classic

徐广文 Guang-wen XU, London

Abstract: The Huangdi's Internal Classic (黄帝内经) discusses the life regulation of human body in many chapters as seen in the Plain Questions and the Miraculous Pivot, and there are three major life regulating systems, including the meridian regulating system, the Zang-fu regulating system, and the interstices and triple-energizer (San Jiao) regulating system.

Keywords: Huangdi's Internal Classic; life regulating systems; meridian regulating system; Zang-fu regulating system; Interstices and triple-energizer regulating system.

According to the Huangdi's Internal Classic, the life regulation of the human body is achieved through three major regulating systems, including the meridian regulating system, the Zang-fu regulating system, and

the interstices and triple-energizer regulating system. The Huangdi's Internal Classic discusses thoroughly on the topics of meridians, Zang-fu organs, and the interstices and triple-energizer. In this essay, we try to

provide a brief review on the three major life regulating systems of human body by Huangdi's Internal Classic

1. Meridian regulation

In Chinese medicine, the meridians make an important regulating system of human body. As what the Huangdi's Internal Classic remarks:

"The conduit vessels serve to transmit blood and qi; they nourish the Yin and Yang [realms]. They moisten the sinews and the bones and they make the joints flexible." [2]

"The [qi of the] Yin vessels circulate through the Zang organs. The [qi of the] Yang vessels circulate through the Fu organs repositories. This is like a ring without end. And nobody knows the underlying set-up. Where it ends there is a new beginning. The qi that spill over, they moisten the Zang organs and Fu organs repositories internationally. Externally they moisten the skin structures." [2]

"Now the twelve conduit vessels, internally they are tied to the Zang organs and the Fu organs, externally they are connected with the limbs and the joints." [2]

"[Humans have] twelve conduit vessels and 365 networks [vessels]. Their blood and qi all rise into the face and move into the empty orifices." [2]

It is also stated in the text that branches of the heart meridian, spleen meridian, liver meridian, stomach meridian and gallbladder meridian all run through the eye cords and into brain, and the sinews of the bladder meridian, gallbladder meridian, stomach meridian, small intestine meridian and the triple energizer meridian also run to eyes, circulate surround the orifices and connect with the brain.

These quotations show that the meridians run to and from the exterior and the interior of the body, pertaining internally to the Zang-Fu organs, extending externally to the limbs and bones, running up to the head, circulating into the five sense organs and finding their links to the brain. Through the network that connects all parts of the body, meridians could transport qi and blood to every corner of the body, balance Yin and Yang, regulate the functions of Zang-Fu organs, the sensory organs and the orifices. Thus the meridians links up every parts of body into a whole system and make one of three major life regulating systems of human body.

2. Zang-Fu regulation

Let's review some important texts from the Huangdi's Internal Classic on this topic first.

a. "A person's blood and qi, essence and spirit, it is with them that life is provided and one's nature and existence are upheld." [2]

b. "The five Zang organs, they serve to store essence spirit, blood and qi, hun and po souls." [2]

c. "Blood, vessels, Ying [qi, guard] qi, essence and spirit, they are stored in the five Zang organs."

d. "The eyes are [the den collecting] the essence of the five Zang organs and six Fu organs repositories. The Ying [qi] and the guard [qi], the hun and po souls pass through there continuously. That is where the spirit qi is generated." [2]

e. "The heart is the big ruler among the five Zang organs and six Fu organs repositories. It is the place where the essence spirit resides." [2]

f. "all [these states] are generated by the five Zang organs. Now, the heart stores the spirit, the lung stores the qi, the liver stores the blood, the spleen stores the flesh, the kidneys store the will, and this completes the physical appearance. The mind penetrates [everything], in the interior it links up with bones and marrow, thereby completing the physical appearance of the body. The five Zang, the paths of the five Zang organs they all emerge from the conduit tunnels with [the latter] serving to pass the blood and the qi." [2]

g. "What the five Zang rule: The heart rules the vessels. The Lung rules the skin. The Liver rules the sinews. The spleen rules the flesh. The kidneys rule the bones." [1]

h. "What the five Zang rule the five senses organs: The liver governing the eyes; The heart governing the tongue; The lung governing the nose; The spleen governing the mouth; The kidneys governing the ears." [1]

The theory of holism set by the Huangdi's Internal Classic believes that the five Zang organs functions in the core of the life system. With the links from the center of the system, the five Zang organs make the whole body unified. There are close links between Zang-fu and meridians, the five sense organs, the limbs and bones, etc. There are functions of mutual restraint, interaction and regulation among the Five Zang organs and between Zang organs and Fu organs. In this way, Zang-Fu organs dominate the whole system and regulate all the life activities of the body, thus they make one of the major regulating systems of the human body as well.

3. Interstices and triple-energizer regulation

The following are chosen quotations on this topic from the Huangdi's Internal Classic:

"The Cou Li and triple burner are passageway of transportation of body fluid." [2]

"The triple burner is the official functioning as opener of channels. The paths of water originate in it." [2]

"When the upper burner opens and sends something out pass on the flavors of the five grains, to steam the skin, to fill the body, to moisten the body hair, in the same way as mist and dew provides humidity, then that is what is called 'qi'." [2]

"The middle energizer, the qi received, there are discharged as dregs, steamed as Jin and Ye [body fluid], body liquids, and transformed to fine essence.

[The latter] pours upward into the lung vessel where it is transformed to blood which in turn is supplied to the entire body.” [2]

“The central burner receives the qi. It extracts their juice and transforms it into something red. That is called ‘blood’” [2]

“The stomach and the intestines receive grain; the upper burner releases qi. It is to them to supply the partings of the flesh with warmth, and to nourish the bones and the joints, as well as to penetrate the skin structures [Cou Li].” [2]

According to the above descriptions, that the upper energizer connects to the interstices (腠理 cou li) certainly means the triple-energizer gets the connection to the interstices.

“The triple burner is the official functioning as opener of channels. The paths of water originate in it.” [2]

“The kidneys are unity with the triple burner and the urinary bladder. The triple burner and the urinary bladder correspond to the skin structures and the hair on the body.” [2]

“When there is summer heat and the garments are thick, then the skin structures open and sweat is emitted as a result. ... When the heaven is cold, then the skin structures close and qi and dampness do not move. The water descends and remains in the urinary bladder. This then generates urine and qi.” [2]

In hot weather the pores of skin are often open and secrete more sweat, while the urination is reduced; in cold weather, the pores are often closed and make little sweat, while there is more urination. This is exactly what it means in the narration “The triple burner and the urinary bladder correspond to the skin structures and the hair on the body”. It shows that the interstices and the triple-energizer are interlinked, and they are the regulators of the function of body fluid [5]

The triple energizer is the channel where the defending qi, original qi and body fluid are regulated and transported. There are many discussions on the same issue in later eras. The Synopsis of Prescriptions of the Golden Chamber (《金匱要略》Jin Gui Yao Lue) gives the definition that: “The Cou (腠) is the path of the original qi (元气 yuan qi) and the place where the qi flow into. The Li (理) is the texture of the skin and Zang-fu organs.” And there stated in Wang Bing’s annotation: “The Cou sites where body fluid ooze and discharge.”

The above discussions illustrate that the interstices connects the triple energizer and make the pathways of the circulation of the original qi, defending qi, nourishing qi and body fluid. [5]

Classic of Difficult Issues (《难经》, NanJing) states:

“The triple-energizer is the path of three kinds of qi and the tunnel to five Zang organs and six Fu organs.”

“The triple-energizer is the path of water and food, where qi starts and ends.”

In the Zhong Zang Classic (《中藏经》Zhong Zang Jing), Hua Tuo states: “The triple-energizer gathers qi

from three origins. It is named the mansion of the lucid juice, and is the leader of the five Zang organs and six Fu organs, of the nutrient qi and defending qi, the qi in meridians, the qi of the deep and the superficial, of the left and the right, the top and the bottom. Only when the triple-energizer is unobstructed, all of the mentioned are unobstructed. Watering the whole body, regulating the internal and the external, nourishing from the left and to the right, dispersing the ascending and the descending, it functions without a parallel.”

The triple energizer is the channel where the defending qi, original qi and body fluid are regulated and transported. The interstices and triple-energizer cover the five Zang organs and six Fu organs interiorly, extend to the skin interstices and muscles exteriorly, and make the qi circulate through the whole body without any missing part. It is the leader of the qi of whole body, and it regulates the transformation of qi and the movement of the defending qi, the original qi and body fluid in all aspects of ascending, descending, entering and exiting flows [4].

And on the principle from the Huangdi’s Internal Classic: “Human being is correspondent to the heaven and earth” and “The man is the mutual reference with heaven and earth” to further explore the theory of the Huangdi’s Internal Classic and other Classic TCM literatures about Cou-Li (interstices) and San-Jiao (triple-energizer). The author describes the Cou-Li and San-Jiao as the life space of the human body. Space breeds life. The space of the nature, with the effect of the sunlight, makes the air flowing, water circulating upward and downward. “The qi of the earth rises up and turns into clouds; the qi of heaven descends and becomes the rain”, in this way it nourishes the earth and makes everything to grow, and purifying the air at the same time. The human body’s space of Cou-Li and San-Jiao are the place for Qi transformation; It is the passage way of Qi and body fluid for their movement of ascending-descending, in and out. The role of Yang qi is to transform the nutrients of water and food to generate Ying-wei, qi and blood, body fluid, which are transported to the whole body through the passageway of Cou-Li and San-jiao, to moisten skin, nourish Zang-Fu organs (viscera-and-bowels), muscles, bones, joints, spinal cord and brain. Cou-li’s Wei-qi regulates the opening and closing of sweat pores, exudates sweat from sweat pores. Qi-transforming of San-jiao, makes the turbid gas (carbon dioxide) to be exhaled from the lungs and nose, and the urine and stool are expelled from urethra and anus. Thereby purifying human body. Therefore, the space between heaven and earth is very similar to the space of human body (the space is Cou-li and San-jiao), which is mainly to regulate the ‘qi and water’. [4]

This demonstrates that the human being is the mutual reference with heaven and earth, the nature has space of heaven and earth, and everything is endless. Similarly, the human body has a life space, and life can never stop. [4]

Thus the interstices and triple-energizer also make one of the three major life regulating systems of the human body.

Conclusion

The life activities of human body is based on the substantial and energetic functions of the defending qi and nourishing qi, qi and blood, water and body fluid, the essence and the marrow. It is narrated in the Plain Questions: "If his Yin and Yang energies fail to communicate, his vital energy will be declined and finally exhausted." (On the Human Vital Energy Connecting with Nature) Yin and Yang, the nourishing qi and defending qi, qi and blood, essence, spirit and marrow, they are not only substances of the body, but also functions in the activities of the living life. The three-major regulating systems of Zang-Fu organs, Meridians and the interstices and triple-energizer, they function together to keep a dynamic balance of the physical and physiological body, with the five Zang organs as the core part, under the domination of the heart spirit (心神 mind), with connections and mutual actions of Zang-fu organs, and achieve an ideal healthy

condition what the classic teaches: 'The Yin and Yang energies of a man being kept in a state of equilibrium; his body will be strong and his spirit sound.' [2]

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我对科学，哲学及中医药学的思辨历程

钟守明 博士 Oxford

本人于 1965 年从原南京药学院（现在为中国药科大学）毕业后，在有关药学科学的很多单位工作过。其中包括了药品检验所，医院药房，药厂及医药院校，在 1978 年考取了中药化学（植物化学）专业研究生。1979 年，我作为中国对外改革开放以后第一批派到国外的留学生来到英国。当时英美的大学任我选择，攻读博士学位注重的是选择该领域内学术领先的导师，因此我选择了英国 Strathclyde 大学的沃特曼教授。如果有人对植物化学（在中国亦称中药化学）这专业是做什么工作不很了解的话，我提一下一个人大家就会明白，那就是诺贝尔奖得主屠呦呦教授。她就是一个植物化学家。从年龄上讲，他应该是我的学姐。下面我还会讲到有关她的工作和成就。

1983 年博士毕业后，我作为中国 1949 年以后第一个拿到药学博士学位的学者，回到中国药科大学当老师。1989 年应 Strathclyde 大学的邀请，到该校当访问教授，从事研究和教学工作。除了发表研究文章以外，还参加了两次生命科学方面的国际会议。这两次会议的体会，结合我自己工作的结果，我开始思考一个很重要的问题。即，我作为一个科学家，难道就是周而复始地拿基金，搞研究，发表文章吗？开始怀疑我搞研究工作的意义，主要是对社会，对人类究竟有什么贡献。我用植物化学的方法，研究过在临床上使用有效并且安全的中药，印度传统药。其结果往往是在用生物活性指导的分离提取纯化的过程中，随着提取物纯度的增加，其生物活性都往往越来越弱。当最后分离纯化到单体化合物时，一般都是活性很弱，而毒性反而增加得很厉害。因此就完全失去了药用的意义，不可能开发成为一个药品。也就是说，从传统有效的植物药中，试图分离出有效的单体化合物（NCE）开发成为临床药品的可能，或者说概率是相当小的。英语常用“one in a million”来形容小概率事件。而我上述说的相当小的概率应远远小于百万分之一。这也是为什么上个世纪末，全世界各个大制药企业都把天然产物研发部门砍掉的主要原因（下面我还将具体分析其背景）。因此，我开始认识到，我个人这一辈子要想从任何的植物药中研发出一个 NCE 并成为药品的可能性几乎是零。再回到上面提到的两次国际会议。参加者有药理学家，分子生物学家，细胞生物学家，植物化学家等等。他们在各自的领域，比如，在某一个药理模型上，在某一个细胞水平上，在某一个分子水平上，在某一个通道中，某一个蛋白质上，发现了什么以前没有发现过的所谓“机理”（mechanism）或“活性”（activity），到大会上作报告交流。我不否

认，我和这些科学家们的研究成果，对于人类知识的积累，是起到了一定的作用。这些研究成果可以发表文章，可以在水平相当高的，国际学术会议上宣讲，作报告，对作者起到功成名就之作用。但对于人类医疗保健的贡献，也许作者们在有生之年都看不见的。我认为这些还不是最重要的。最重要的问题是，实线正在证明，像这样微观的，隔离的，机械的研究方法，是生命科学难以有重大突破的根本原因。用“只见树木，不见森林”来形容当时乃至现在这种状态根本不够到位。我觉得，像我等这样的科学家，把头埋在分子里，细胞中，薄膜上，通道内的做法，即便用一叶障目来形容，都还不够。可这些却是西方科学研究方法在这些相关领域的常态，甚至是“金科玉律”。所以当时（1991 年）我就想“You guys go ahead, I am going to quit”！可是，一个没权缺钱置身异乡的穷教授，又能往何处逃逸？或者用现代流行语说，走出“象牙塔”后如何创业？当时的心情便像李白“行路难”一诗中描述的，“停杯投箸不能食，拔剑四顾心茫然”，“欲渡黄河冰川塞，将登太行雪满山”。

近 400 年的科学技术发展史。使人们形成了一个共识，那就是只有当物理科学有了革命性（Revolution）的突破，任何其他学科才可能有革命性的进展。否则所有的进步都只可能是一种改进（evolution）。因此我就去通过阅读物理学杂志的方法寻找物理学的前沿。结果发现，除了以量子力学为基础的强场理论，弱场理论等等以外，当时在 80 年代初开始而方兴未艾的一种理论叫混沌理论，也是物理学的前沿之一。因此就开始学习了解混沌理论。没有多久，结合自己所学，我就开始认识到二点：一，人体是一个典型的混沌系统；二，中医药学（Traditional Chinese Medicine）是一个基于混沌理论的实践及一种医疗保健系统。建立在现代科学基础上的现代医药学（西医药学），其特点只能是微观，机械，分析，还原。打个比喻就是，把人体当作一部机器，比如汽车来处理或称作“治疗”。不可否认，现代医药学在现代科学发展的基础上取得了长足的进步（evolution），对人类的疾病控制起到了难以替代的重要作用，乃至成了世界各国的所谓“主流医药”。也许，这“主流医药”之地位在以后几十年乃至上百年内都不会被替代，但人们已开始认识到其局限性及缺点。这种局限性及缺点，随着时间的推移，人类认知之提高，会变多越来越多，越来越明显，越来越不能满足人类对医疗保健之需求。但由于其基于的理论基础和哲学思想，它面临的是一个无解方程式。

让我们来看一下中医学（TCM）系统。我说它是混沌理论之实践，并非指中国人几千年前就认识到了混沌理论，而是中国古代的人在观察，探索，体验包括宇宙，地球，自然，人体（天，地，人）这些客观世界的过程中，发现，总结出了很多“相关性”，将这些相关性应用到人类的医疗卫生保健，便有了“皇帝内经”，“神农本草经”，“本草纲目”等等一系列的，后来成为“中医学”系统的几千部著作，并在实践中产生了历代中医学系统的代表人物如华佗，张仲景，李时珍，孙思邈等等。与现代医学相对而言，TCM 是一种基于宏观的，系统的，非还原式的，混沌的医疗保健体系。是独树于现代科学和医学之外的一种特殊而更接近人体实际状况（混沌体系）的理论和实践。与“西医学”一起，这二种系统在满足人类对医疗卫生保健的需求方面，可以发挥各自的优点，相辅相成。特别想说的是，那种用一种系统的框架去验证另一种系统是可行，也毫无必要的。不错，现代医学是“科学”的。但科学不等于真理！现代科学能认识的真理不到宇宙中存在的真理之白分之几（施一公院士说 4%）。TCM 不属于现代科学范畴，但它认识到的，并在实践中被证明正确有效的，完全有可能是科学能认知的 4%以外的宇宙中存在的真理。不言而喻，现代医学和 TCM 各有其长处和不足，但从医疗保健及对宇宙，人体之真理的认识的总体上讲，我坚持认为，TCM 比现代医学更先进（本人另有论述：“世界医疗保健大趋势及中医药之先进性”）。因此，我支持已故钱学森先生的观点（大意）：西医学还处于幼年阶段，要赶上中医药还需三、四百年时间。同时，我也一直为中国的中医药状况感到担忧。口号上，是重视了中医药，政策上，往往是背道而驰。从教育到科研，从医疗卫生制度到医药实践，无不如此。所以，我倾向于同外国有识之士的看法，即中医药正在被中国人自己淘汰。由于主题及篇幅限制，无法详细展开这一“天大的”论题。但想借此机会提出长久积聚在脑海中，感到不吐不快的对某些做法的一得之见。有些则是希望改变现状的疑问。

- 中医，中药的所谓标准化的所有政策，行动，都是违背中医药系统精髓的，不管其目的是为了满足不同错误的所谓“科学化”，还是商业化或者其它什么化的需求。当外国人正吸取中医药系统的精髓时，比如复方用药，个体化诊疗，治未病等等，中国人却热衷于“削足适履”！
- “中西医结合”的提法是很好的，但让西医去学中医的做法是错误的。正确的“结合”，应该落实到病人，病种。针对某人，某病，选择最适合的西医或者中医的诊断，检查，治疗，康复等手段。即使同一病人，在治疗的不同阶段，也可以选用中医中药或西医西药的交替或结合手段，以获最佳疗效。这在实践中，已有过无数及成功病例。消除“门户之见”，中西医专家密切配合，去治疗某个病人，这才是真正意义上的“中西医

结合”。

- 中国应该严格，立即，全部取消中药静脉注射剂。作为药师，中药化学专家，有专业资质，且没有任何方面的利益冲突，凭良知和人道主义提出上述建议。所谓中医药“现代化”，这不是个新命题。在几千年历史长河中，中医药一直在不断地按自身发展需要“现代化”着。比如针灸器具之改进，从煎剂到膏丹丸散等等，但是，“现代化”的中药静脉注射剂里的中药成份，不管用什么方法纯化，最后产品，一定是一组几百上千种化合物的混合物！那怕纯化到 99.9%（举极端例子以说明问题），它与 99.9%纯度的单一化合物成份还是有区别的。因为，后者的 0.1%的化学本质是什么是清楚的，可控的，无害的。而前者的 0.1%是什么是不清楚的，不可控的，因此，其害处当然也不清楚。更何况，在实践中的中药静脉注射液中的单一化学成分，很少有超过 50%的。有些还是复方！而且，任何研发者或厂家都不可能鉴别出其中一半以上（也许有几千种）的未知化合物。这些未知化合物才是中药静脉注射剂发生高死亡率的起因。这点，国内相关领导部门，高校，研发院所，药企等都没有认识到，或者不想认识到。因此，往往把死因归结于“过敏”，“热原反应”，“过期变质”或“质控不严”等。当然，还有相当大一部分是死了不知道，也不需要追查死因的。比如严重心脑血管患者之突然死亡等。我认为中药静脉注射剂中那些未知化合物是引起死亡的主要原因是深度静脉血栓（DVT）之形成。这几百上千种未知化合物，即便很微量，进入血液后，某些（那怕只有一种）可能会与血液中的某种成分结合，产生沉淀（微粒），随血液流动到心、脑或肺部毛细血管，产生堵塞（DVT），从而引起死亡。即便正常人，长途坐飞机，因为不活动，也可能出现 DVT（血凝引发）及引起死亡。因此，现在流行长途飞行用用小剂量阿斯匹林防止产生血凝。所以，在看到这篇文章后，在中药静脉注射剂被取消前，你应该知道告诉你的家人，亲友如何面对中药静脉注射剂了。
- 为什么中医大学毕业的学生，很少人成为中医专家或大师？
- 为什么中医专业研究生，特别是博士研究生的研究课题，绝大部分都是现代生命科学的课题及研究方法？这种培养现代科研人员做法，是否可以被认为是以某种方式，阻止有潜质的中医学子发展成为名中医？现在，中国的大学招聘教师，没有博士学位者基本不可能破录用。中医药大学也不例外。那么，按上述博士研究选题内容的“大趋势”（不如此，很难拿到科研经费）中医药大学培养出来的大部分博士毕业生，能有多少中医药临床经验？靠他们去教书，能培养出合格的中医来吗？长此以往，中国中医药的前途何在？
- 青蒿素究竟是中药还是西药？屠呦呦教授获诺

奖与中医药有多少关系？正确回答这两个问题，将有助于决定中医药发展方向之正本清源。好在有人比较系统地作了解答（王世保：不要让青蒿素救了疟疾患者却废了中医中药）。我赞同文中主要观点，即青蒿素是单一纯化合物，因此，是一种化学药物。再者，它是在西医治疗疟疾的理论指导下应用于临床。因此，它是不折不扣的西药而不是中药。同样从植物中提取纯化的单体化合物并用于临床的西药有很多。比如麻黄碱，莨菪碱，黄连素，秋水仙碱等等。青蒿素不过是其中的一位“姣姣者”。作为植物化学家，他/她可以选择各种来源的动植物，微生物，海洋生物作为寻找新化合物的材料。配合药理试验或活性检测，在西方亦称为天然产物研究开发。在上世纪九十年代初，西方国际大制药公司纷纷把天然产物研发部门砍掉。原因是，他们发现，从天然产物（植物或药材，微生物，海洋生物）中用活

性指导下的分离纯化方法（一般是高通量筛选），比通过计算机设计并合成出化合物作筛选的效率低，成本高，周期长。所以，青蒿素之发现，应该说是一种机率很低的偶然现象。否则，植物化学家们早就会去把中药逐个“筛”一遍了。因此，屠老及其团队过去和现在做的，都是用现代科学的研究方法（植物化学，药物化学，分子/细胞水平活性检测，动物药理等），或是寻找新化合物，或是结构改造老化合物，要不然就是老药新用途的寻找（比如用结构改造后的青蒿素治疗红斑狼疮）等。以上这些，与西方药物研发机构及制药公司所用方法类同，与中医中药没什么重要关系。以上观点，纯属就事论事，实话实说。毫无看轻屠教授成就的意思。相反，我一直很敬重屠老，其成就更值得祝贺。（早年，她长女还在我开的诊所里工作过）。

TCM as Your Career: How You Become a TCM Practitioner and How Your Career Develops

Steve Kippax

My Mother was a Homeopath and herbalist, Father a Baptist minister- so from them I inherited my interest in matters of health and spirituality.

I began studying (Western) herbal medicine in 1980 at The School of Herbal medicine. I was taught basic western medicine (anatomy, physiology, pathology etc) and herbs. The rationale for their use being overwhelmingly pharmacological – i.e. this herb has these chemicals in, which have this effect, which therefore means it is used for this condition.

I qualified in 1985 and started to practice. I had never felt comfortable with this paradigm and explanation of usage, as to me, the logical end result would be to just extract the chemicals that had the effect and use those – i.e. drugs... and the limitations and shortcomings of this approach were becoming more apparent the more I practised.

Isn't it seemingly strangely fantastic how the Tao becomes apparent in our lives... In the late 1980's I was happily practising away and then had the most difficult patient I had ever encountered, who amongst other things, accused me of trying to kill him!

I was distraught and had to seriously consider if I wanted to do this with my life. I went for solace and guidance to the Elder tree and it was decided that I did - and there, seemingly by chance, on my sideboard

was an introductory talk on TCM by Michael McIntyre.

I attended and loved it. What had seemed to be the worst most traumatic incident in my life was actually the spur to grow and develop. True Alchemy.

I enrolled at The School of Chinese Herbal Medicine in London, being taught primarily by Professor Song Ke, Giovanni Maciocia, Mazin Al Khafaji and Michael McIntyre. In April 1992 I went with a small group to Guang zhou TCM university hospital in San yuan li for clinical experience and training.

That was the biggest culture shock in my life.

First impression was ... What a lot of people!

There were 2 sorts of money. Very little refrigeration – meaning most restaurants looked to an awestruck westerner like pet shops. If I stopped to look at a map, inside seconds I had attracted a crowd of 10, 20, 30 or more people just looking at me... not in an intimidating fashion but out of curiosity. It was damp, and not really very warm, if clothes weren't cared for mould would start growing on them inside a day or 2. I was not very well and did not really enjoy the experience but more survived. We then went to Gui lin, Yang shuo, Xi an, Kun ming and Hong kong before heading to the Philippines

So, when the next year I decided that I should really learn acupuncture I decided despite some reservations to go back, on my own, to do the 3 month course. I arrived the first week in September - and it was hot and very humid - so I sweated. I was also even less well - having probably a duodenal ulcer. I was having acupuncture most days, taking herbs, pills, drugs and wearing a herbal belt. I was just about able to function. I then was advised to see the Qi gong department - I was told to do 20 minutes walking and 20 minutes standing Qi gong three times a day - so I duly did and inside about 10 days the pain went away and did not return! I have not stopped doing Qi gong since.

I returned to Guang zhou in 1995 and did advanced herbal medicine and acupuncture. At that time, I was practising in Clapham and Suffolk. In Clapham north was the Gateway clinic which was the only dedicated TCM clinic on the NHS in the country. I began working there and it was reassuringly Chinese and familiar with a 9-bed treatment room, and a seemingly endless supply of patients.

We were allotted 15 minutes per patient to consult, diagnose, prescribe and needle. In the 2 and a half days I worked there I was guaranteed to see at least 75 patients, excluding the ones who attended the drop-in ear acupuncture service. We had Qi gong classes in the morning and specialised in treating HIV / AIDS and Hepatitis C.

Four of our HIV / AIDS patients went from being HIV positive to being HIV negative. Many of our Hepatitis patients became not only antibody but also antigen negative.

Everything has a time and a season - the founder of the clinic left and the laissez faire freedom we had enjoyed at the Gateway gradually became a thing of

the past with the bureaucratic burden and official oversight steadily increasing.

My path then took me to a new venture in Soho, The Third Space where I was employed as Joint Head of Medical Services with a GP and we were tasked with creating London's leading integrated medical centre - from scratch. We wrote the business plan, advertised for practitioners, identified the IT system, chose the team - orthodox and complementary medicine practitioners working together, and duly opened in 2001. I worked there for 17 years - over that time I got a Masters Degree in Herbal medicine, took 6 of my herbal students back to Guang zhou for clinical training, learnt Tai ji, was elected President of the National Institute of Medical Herbalists, the oldest association of herbalists in the western world, and was named as one of the country's top 20 Health Gurus by the Daily Telegraph.

Everything has a time and a season - I left The Third Space - my London practice is now at The London Natural Health Centre in Holborn. My first book "Health in theory and practice - circling the square" was published in April 2019.

I practice TCM and am honoured to be a proud member of the ATCM where I feel totally at home, if not at times somewhat confused - my Chinese is a daily preoccupation and as I persevere I am optimistic that my understanding of the nuances of the ATCM will grow.

<https://www.telegraph.co.uk/lifestyle/wellbeing/diet/3351957/Top-20-health-gurus.html>

<https://www.telegraph.co.uk/lifestyle/wellbeing/8373943/Fitness-Workshop-Qi-Gong.html>

信任

付筱笙

Anderson 男 81 岁 2004 年 6 月 28 来我的诊所治疗。西医诊断前列腺癌晚期，还能活 6 个月。他是我的一位老病人的叔叔。这个病人叫 Mike，他是一位汽车修理工，因长期劳累加上心情抑郁患有慢性关节炎，经常双手双膝关节疼痛，僵硬屈伸不利而来治疗。家庭医生早已下了停止工作的通知书。但是本人是自雇没有其他选择。他每周做一次针灸同时服用草药，半年后基本没有什么不适了。所以很相信中医。他每次治疗都和妻子一起来，夫妻感情也很好，总是形影不离。Mike 家有兄弟姐妹十人，

而这个叔叔只有一个儿子，性格内向不喜欢与人交际，也不喜欢和亲属来往，结婚多年也没有孩子。Mike 的妻子为人善良，经常和他去一起去叔叔家探望，每周一次。因为两家走的很近，所以知道中医治疗许多病效果不错，其中包括癌症的晚期治疗。

Anderson 就诊时的症状：小腹胀痛一周余，向腰部放射，小便频，大便困难很久了口服西药通便。睡眠欠佳，食少纳呆，舌红苔焦黑而厚腻，脉玄滑。BP160/80mmHg，患有高血压几十年，口服一种西药控

制还算稳定，血液检测 PSA138。中医诊断：腹痛。本虚标实，热毒积盛。治法：标本兼治，清热解毒。活血化瘀。方药：党参 15，白术 10，茯苓 10，甘草 4 半枝莲 8，白花蛇草 8，大黄 10，夏枯草 8，丹皮 8，丹参 8，白芷 6，三棱 6，莪术 6。七付草药水煎服。每日一包。他对我给的草药的疗效知道的很多，当大便溏时把大黄拣出来，当大便秘时把大黄在加上。在服用中药的时候，他不在服用西药通便了。6 个月过去了，他去医院复查，结果 PSA27。西医医生不敢相信这是真的，并告诉他如果再升也是必死无疑。

May 是他的妻子，他每次来治疗都带着她。May 说自 17 岁两人在一起就在也没有分开过，她说她很幸运能遇到他，他很体贴，家中所有的账单都是他付，也不让她干太多的家务活，特别是丈夫退休以后她更是什么都不干了，丈夫包揽了所有的家务活。她说如果有一天他先走了她真的不知道该怎么生活。她还告诉我说她的身体还不错除了有点轻微的哮喘，偶尔用一，二次喷雾剂之外，几乎没有服过任何药。但她每次陪丈夫治疗我从她的眼神和谈话中感觉到她的焦虑和紧张。她让我保证一定要让 PSA 只降不升，我说我不能保证但我会尽我的最大努力。

从那以后，我把原方的半枝莲和白花蛇舌草减一半的量，又加了黄芪 15 克。又过了半年去检测血液，结果是 9。大家都很高兴，特别是 May 她紧紧的给我一个英国礼节的拥抱还在我的脸上一边亲上一口。这以后的每次治疗都是一样的礼节了，两年过去了。血液检测结果 0.3，西医医生说 Anderson 不用在检测和治疗了，他痊愈了。就在这时，May 查出肺癌已经转移到大肠但需要去医院做 MRI 做最后的确诊。NHS 的信已经收到了，她拒绝去医院，她说她信任我，让我给她治疗。我劝她说必须检查明确诊断后再讨论怎样进行下一步的治疗方案。她同意了但有一个条件：必须我亲自陪同她一起去医院才可以。那时我有两家诊所，距离相距较远，我丈夫每天需要把我先送上班他在去另一个地方，陪她去医院我的诊所就得关门。

这一天的下午 1:30 分，Anderson 开车来接我，May

没有坐在副驾驶的位置上而是坐在了后排，我也拉开了后面的车门，一上车她就伸出手来紧紧的抓住我的手，拉我靠近她坐下来，几乎是挨在一起。我在大学时喜欢运动，投过铅球，炼过许多器具，手比较厚而结实，她把我的手握的很痛，同时我感到她的手像冰一样寒冷又湿漉漉的。我向她笑着说：don't worry, you will be fine. 医院不远，只有 10 多分钟左右，这是一个有 700 多床位的大医院，到了医院门口我俩下了车，站在那里等她老公去停车，很多过往行人在眼前匆匆走过。May 自从下车也没有放下我的手还是紧紧的握着。这时尴尬的事情发生了，她站在那里用双手握住我的右手举到了胸前，用一只胳膊夹住了我的手臂，生怕我跑了似的，对眼前走过的人流说：我给你们介绍一下，这位是付医生，她治好了我丈夫的癌症，她是中医。我简直不敢相信眼前发生的这一切，平素少言寡语见人都紧张的她现在怎么这样胆大！我的脸感觉像火烧一样灼热，心急如焚，想尽一切办法赶快摆脱这种难堪的局面。

这时，她丈夫来了，我们一起向检查室走去，在做检查 MRI 的门口旁，清洁女工正在拖地，May 向她摆了摆手示意她停下来，女工一脸茫然地看着我们直起了腰，她张口刚要说这是付医，，，，，我马上打断她的话并拉她快些进去，她进去以后又向她们介绍了我是谁。检查很顺利，结果出来了。肺癌晚期转移到大肠，肠道梗阻严重需要马上手术。很快她被安排住院做了肠道切除，几天后我去医院看她，她坐在椅子上刚刚吃完晚饭，病房内充满了笑声，里面很多人，我成了中心人物，就连护士也来问病。两周后，她坚持回家疗养，医院同意了。回家一周后因心肌梗死在医院抢救无效去世。

Anderson 痛不欲生，在妻子过世的几年里见人就哭，时常自己开车来治疗一些疼痛，在他刚刚过完 93 岁生日不久，被三个小偷入室打伤送进医院，他一气之下不吃不喝几天后过世。

我在他侄女的邀请下参加了葬礼，人们都说如果不发生这个意外的话他能活过 100 岁，我想这就是上帝送给我的另一种亲情吧！

英国中医药学会

The Association of Traditional Chinese Medicine and Acupuncture UK

地址 Address: ATCM, Suite 1, The Brentano Suite, Solar House,, 915 High Road, North Finchley
London N12 8QJ

电话/传真 Tel/Fax: 0044 (0)20 8457 2560

微信 WeChat: ATCM-OFFICE

电子邮件 Email: info@atcm.co.uk

网站 Website: www.atcm.co.uk

新型冠状病毒专栏

Special Column on Covid-19

编者按：新冠病毒肺炎已成世界流行之势，目前欧美的疫情仍然相当严重。中国国内疫情防治独树一帜，中医药的广泛介入显示出良好的疗效。在西方由于法规和认同的差异，中医药尚无法进入抗疫的主流体系之内。本栏目刊登一些中国的中医药防治新冠病毒的信息，以及两位英国中医师远程诊治的个案报道，仅供读者参考。

Editor's Note: Covid-19 has become the world's pandemic, the current outbreak in Europe is still quite serious. China's domestic prevention and control of the epidemic is credible, with the extensive involvement of Chinese medicine showing good results. In the West due to the differences in regulations and recognition, Chinese medicine is not yet able to enter the mainstream system of anti-covid 19. This column publishes some information on the TCM prevention and treatment of the novel coronavirus in China, as well as the case reports of two Chinese medicine practitioners in the UK on treating covid-19 patients remotely. This is for the reader's reference only.

新冠病毒肺炎诊疗方案（试行第七版）中医部分摘录

中国国家卫健委公布

（四）中医治疗。

本病属于中医“疫”病范畴，病因为感受“疫戾”之气，各地可根据病情、当地气候特点以及不同体质等情况，参照下列方案进行辨证论治。涉及到超药典剂量，应当在医师指导下使用。

1. 医学观察期

临床表现 1：乏力伴胃肠不适

推荐中成药：藿香正气胶囊（丸、水、口服液）

临床表现 2：乏力伴发热

推荐中成药：金花清感颗粒、连花清瘟胶囊（颗粒）、疏风解毒胶囊（颗粒）

2. 临床治疗期（确诊病例）

2.1 清肺排毒汤

适用范围：结合多地医生临床观察，适用于轻型、普通型、重型患者，在危重型患者救治中可结合患者实际情况合理使用。

基础方剂：麻黄 9g、炙甘草 6g、杏仁 9g、生石膏 15~30g（先煎）、桂枝 9g、泽泻 9g、猪苓 9g、白术 9g、茯苓 15g、柴胡 16g、黄芩 6g、姜半夏 9g、生姜 9g、紫菀 9g、冬花 9g、射干 9g、细辛 6g、山药 12g、枳实 6g、陈皮 6g、藿香 9g。

服法：传统中药饮片，水煎服。每天一付，早晚各一次（饭后四十分钟），温服，三付一个疗程。

如有条件，每次服完药可加服大米汤半碗，舌干津液亏虚者可多服至一碗。（注：如患者不发热则生石膏的用量要小，发热或壮热可加大生石膏用量）。若症状好转而未痊愈则服用第二个疗程，若患者有特殊情况或其他基础病，第二个疗程可以根据实际情况修改处方，症状消失则停药。

处方来源：国家卫生健康委办公厅国家中医药管理局办公室《关于推荐在中西医结合救治新型冠状病毒感染的肺炎中使用“清肺排毒汤”的通知》（国中医药办医政函〔2020〕22号）。

2.2 轻型

（1）寒湿郁肺证

临床表现：发热，乏力，周身酸痛，咳嗽，咯痰，胸紧憋气，纳呆，恶心，呕吐，大便粘腻不爽。舌质淡胖齿痕或淡红，苔白厚腐腻或白腻，脉濡或滑。

推荐处方：生麻黄 6g、生石膏 15g、杏仁 9g、羌活 15g、草薢子 15g、贯众 9g、地龙 15g、徐长卿 15g、藿香 15g、佩兰 9g、苍术 15g、云苓 45g、生白术 30g、焦三仙各 9g、厚朴 15g、焦槟榔 9g、煨草果 9g、生姜 15g。

服法：每日 1 剂，水煎 600ml，分 3 次服用，早中晚各 1 次，饭前服用。

(2) 湿热蕴肺证

临床表现：低热或不发热，微恶寒，乏力，头身困重，肌肉酸痛，干咳痰少，咽痛，口干不欲多饮，或伴有胸闷脱痞，无汗或汗出不畅，或见呕恶纳呆，便澹或大便粘滞不爽。舌淡红，苔白厚腻或薄黄，脉滑数或濡。

推荐处方：槟榔 10g、草果 10g、厚朴 10g、知母 10g、黄芩 10g、柴胡 10g、赤芍 10g、连翘 15g、青蒿 10g（后下）、苍术 10g、大青叶 10g、生甘草 5g。

服法：每日 1 剂，水煎 400ml，分 2 次服用，早晚各 1 次。

2.3 普通型

(1) 湿毒郁肺证

临床表现：发热，咳嗽痰少，或有黄痰，憋闷气促，腹胀，便秘不畅。舌质暗红，舌体胖，苔黄腻或黄燥，脉滑数或弦滑。

推荐处方：生麻黄 6g、苦杏仁 15g、生石膏 30g、生薏苡仁 30g、茅苍术 10g、广藿香 15g、青蒿草 12g、虎杖 20g、马鞭草 30g、干芦根 30g、草薢子 15g、化橘红 15g、生甘草 10g。

服法：每日 1 剂，水煎 400ml，分 2 次服用，早晚各 1 次。

(2) 寒湿阻肺证

临床表现：低热，身热不扬，或未热，干咳，少痰，倦怠乏力，胸闷，月完痞，或呕恶，便澹。舌质淡或淡红，苔白或白腻，脉濡。

推荐处方：苍术 15g、陈皮 10g、厚朴 10g、藿香 10g、草果 6g、生麻黄 6g、羌活 10g、生姜 10g、槟榔 10g。

服法：每日 1 剂，水煎 400ml，分 2 次服用，早晚各 1 次。

2.4 重型

(1) 疫毒闭肺证

临床表现：发热面红，咳嗽，痰黄粘少，或痰中带血，喘憋气促，疲乏倦怠，口干苦粘，恶心不食，大便不畅，小便短赤。舌红，苔黄腻，脉滑数。

推荐处方：化湿败毒方

基础方剂：生麻黄 6g、杏仁 9g、生石膏 15g、甘草 3g、着香 10g（后下）、厚朴 10g、苍术 15g、草果 10g、法半夏 9g、茯苓 15g、生大黄 5g（后下）、生黄芩 10g、葶苈子 10g、赤芍 10g。

服法：每日 1~2 剂，水煎服，每次 100ml~200ml，一日 2~4 次，口服或鼻饲。

(2) 气营两燔证

临床表现：大热烦渴，喘憋气促，谵语神昏，视物错瞀，或发斑疹，或吐血、衄血，或四肢抽搐。舌绛少苔或无苔，脉沉细数，或浮大而数。

推荐处方：生石膏 30~60g（先煎）、知母 30g、生地 30~60g、水牛角 30g（先煎）、赤芍 30g、玄参 30g、连翘 15g、丹皮 15g、黄连 6g、竹叶 12g、草房子 15g、生甘草 6g。

服法：每日 1 剂，水煎服，先煎石膏、水牛角后下诸药，每次 100ml~200ml，每日 2~4 次，口服或鼻饲。

推荐中成药：喜炎平注射液、血必净注射液、热毒宁注射液、痰热清注射液、醒脑静注射液。功效相近的药物根据个体情况可选择一种，也可根据临床症状联合使用两种。中药注射剂可与中药汤剂联合使用。

2.5 危重型

内闭外脱证

临床表现：呼吸困难、动辄气喘或需要机械通气，伴神昏，烦躁，汗出肢冷，舌质紫暗，苔厚腻或燥，脉浮大无根。

推荐处方：人参 15g、黑顺片 10g（先煎）、山茱萸 15g，送服苏合香丸或安宫牛黄丸。出现机械通气伴腹胀便秘或大便不畅者，可用生大黄 5~10g 出现人机不同步情况，在镇静和肌松剂使用的情况下，可用生大黄 5~10g 和芒硝 5~10g。

推荐中成药：血必净注射液、热毒宁注射液、痰热清注射液、醒脑静注射液、参附注射液、生脉注射液、参麦注射液。功效相近的药物根据个体情况可选择一种，也可根据临床症状联合使用两种。中药注射剂可与中药汤剂联合使用。

注：重型和危重型中药注射剂推荐用法

中药注射剂的使用遵照药品说明书从小剂量开始、逐步辨证调整的原则，推荐用法如下：

病毒感染或合并轻度细菌感染：0.9%氯化钠注射液 250ml 加喜炎平注射液 100mg bid，或 0.9%氯化钠注射液 250ml 加热毒宁注射液 20ml，或 0.9%氯化钠注射液 250ml 加痰热清注射液 40ml bid。

高热伴意识障碍：0.9%氯化钠注射液 250ml 加醒脑静注射液 20ml bid。

全身炎症反应综合征或/和多脏器功能衰竭：0.9%氯化钠注射液 250ml 加血必净注射液 100ml bid。

免疫抑制：葡萄糖注射液 250ml 加参麦注射液 100ml 或生脉注射液 20~60ml bid。

2.6 恢复期

(1) 肺脾气虚证

临床表现：气短，倦怠乏力，纳差呕恶，痞满，大便无力，便澹不爽。舌淡胖，苔白腻。

推荐处方：法半夏 9g、陈皮 10g、党参 15g、炙黄芩 30g、炒白术 10g、茯苓 15g、藿香 10g、砂仁 6g（后下）、甘草 6g。

服法：每日 1 剂，水煎 400ml，分 2 次服用，早晚各 1 次。

(2) 气阴两虚证

临床表现：乏力，气短，口干，口渴，心悸，汗多，纳差，低热或不热，干咳少痰。舌干少津，脉细或虚无力。

推荐处方：南北沙参各 10g、麦冬 15g、西洋参 6g、五味子 6g、生石膏 15g、淡竹叶 10g、桑叶 10g、芦根 15g、丹参 15g、生甘草 6g。

服法：每日 1 剂，水煎 400ml，分 2 次服用，早晚各 1 次。

English Translation: Diagnosis and Treatment Protocol for COVID19 (7th Edition)

Published by China's State Health Commission on 4th March 2020

Translated by the Translation Committee, World Federation of Chinese Medicine Societies, et al.

Diagnosis and Treatment Protocol for COVID-19 (Trial Version 7)

Traditional Chinese Medicine Treatment

In traditional Chinese medicine (TCM), the COVID-19 falls under the category of "pestilences", which occur as a result of exposure to epidemic pathogens. This Protocol represents standard TCM pattern identification and treatment. Modifications can be made to satisfy the patients' actual conditions, local climate, or individualized body constitutions. Consult with a doctor first before using a higher-than-recommended dosage by the Pharmacopoeia of the People's Republic of China.

1. Medical Observation

Clinical manifestations #1: Fatigue and gastrointestinal discomfort

Recommended Chinese patent medicine: Huoxiang Zhengqi Jiaonang/Wan/Shui/Koufuye (Agastache Qi-Correcting Capsules/Pills/Water/Oral Liquid)

Clinical manifestations #2: Fatigue and fever

Recommended Chinese patent medicine:

Jinhua Qinggan Keli (Honeysuckle Flower Cold-Relieving Granules); Lianhua Qingwen Jiaonang/Keli (Forsythiae and Honeysuckle Flower Pestilence-Clearing Capsules/Granules); Shufeng Jiedu Jiaonang/Keli (Wind-Expelling and Toxin-Removing Capsules/Granules)

2. Clinical treatment (confirmed cases)

2.1 Qingfei Paidu Tang (Lung-Cleansing and Toxins-Removing Decoction)

[Indications]

Clinical observations have suggested that this formula can be used for mild, moderate or severe cases; it may also be used for critically ill patients on an as-needed basis.

[Ingredients]

Ma Huang (Herba Ephedrae) 9g

Zhi Gan Cao (Radix et Rhizoma Glycyrrhizae Praeparata cum Melle) 6g,

Xing Ren (Almond) 9g

Shi Gao (Gypsum) 15-30g*

Gui Zhi (Ramulus Cinnamomi) 9g

Ze Xie (Rhizoma Alismatis) 9g

Zhu Ling (Polyporus) 9g

Bai Zhu (Rhizoma Atractylodis Macrocephalae) 9g

Fu Ling (Poria) 15g

Chai Hu (Radix Bupleuri) 16g

Huang Qin (Radix Scutellariae) 6g

Zi Yuan (Radix et Rhizoma Asteris) 9g

Dong Hua (Flos Farfarae) 9g

She Gan (Rhizoma Belamcandae) 9g

Xi Xin (Radix et Rhizoma Asari) 6g

Shan Yao (Rhizoma Dioscoreae) 12g

Zhi Shi (Fructus Aurantii Immaturus) 6g

Chen Pi (Pericarpium Citri Reticulatae) 6g

Huo Xiang (Herba Agastachis) 9g

Note: *a smaller dose for patients without a fever and bigger dose for those with a fever/high fever.

[Method]

Decoct the above ingredients (prepared slices) with water, one formula a day. Drink the decoction warm in two divided doses, once in the morning and once in the evening. A treatment course consists of three formulas. Continue with the second treatment course if the symptoms are improved but not fully resolved. Modify the formula if patients have emerging or other pre-existing conditions. Discontinue the formula when the symptoms resolved.

[Tips]

If conditions allow, drink 1/2 bowl of rice soup after taking the warm decoction; patients with a dry tongue can drink a bowl.

[Source of the formula]

The Notice on Recommending the Use of "Qingfei Paidu Decoction" in Integrated Traditional Chinese & Western Medicine Treatment for COVID-19 issued by the General Office, National Ministry of Health Commission, and the Office, National Administration of Traditional Chinese Medicine (NATCM) (2020 File No 22, Medical Administration Bureau, NATCM).

2.2 Mild cases**2.2.1 Cold-dampness stagnating in the lung****[Signs and symptoms]**

Fever, fatigue, generalized body aches, cough, expectoration, chest tightness with labored breathing, a poor appetite, nausea, vomiting, and sticky stools with a feeling of incomplete bowel movement. The tongue is pale and swollen with teeth marks and white, thick and curd-like coating. Alternatively, the tongue may be pale red, and the tongue coating may be white and greasy. The pulse is soft or slippery.

[Recommended formula]

Ma Huang (Herba Ephedrae) 6g
Shi Gao (Gypsum) 15g
Xing Ren (Almond) 9g
Qiang Huo (Rhizoma et Radix Notopterygii) 15g
Ting Li Zi (Semen Lepidii) 15g
Guan Zhong (Rhizoma Cyrtomii) 9g
Di Long (Pheretima) 15g
Xu Chang Qing (Radix et Rhizoma Cynanchi Paniculati) 15g
Huo Xiang (Herba Agastachis) 15g
Pei Lan (Herba Eupatorii) 9g
Cang Zhu (Rhizoma Atractylodis) 15g
Yun Ling (Poria) 45g
Bai Zhu (Rhizoma Atractylodis Macrocephalae) 30g
Jiao Mai Ya (Fructus Hordei Germinatus Praeparata) 9g
Jia Shan Zha (Fructus Crataegi Praeparata) 9g
Jiao Shen Qu (Massa Medicata Fermentata) 9g
Hou Po (Cortex Magnoliae Officinalis) 15g
Jiao Bing Lang (Semen Arecae Praeparata) 9g
Wei Cao Guo (Fructus Tsaoako Praeparata) 9g
Sheng Jiang (Fresh Ginger) 15g

[Method]

Decoct with water to get 600ml, one formula a day. Drink the decoction in three divided doses (morning, noon and evening) before meals.

2.2.2 Damp-heat accumulating in the lung**[Signs and symptoms]**

Low-grade or no fever, mild aversion to cold, fatigue, a heavy sensation in the head and body, dry coughs with scanty phlegm, sore throat, and a dry mouth with no desire to drink water. Alternatively, chest tightness, epigastric

fullness, absence of sweating or inhibited sweating, vomiting, a poor appetite, and loose stools or sticky stools with a feeling of incomplete bowel movement may also be present. The Tongue is pale red with a white, thick and greasy or thin, yellow coating. The pulse is soft or slippery and rapid.

[Recommended formula]

Bing Lang (Semen Arecae) 10g
Cao Guo (Fructus Tsaoako) 10g
Hou Po (Cortex Magnoliae Officinalis) 10g
Zhi Mu (Rhizoma Anemarrhenae) 10g
Huang Qin (Radix Scutellariae) 10g
Chai Hu (Radix Bupleuri) 10g
Chi Shao (Radix Paeoniae Rubra) 10g
Lian Qiao (Fructus Forsythiae) 15g
Qing Hao (Herba Artemisiae Annuae) 10g (decoct later)
Cang Zhu (Rhizoma Atractylodis) 10g
Da Qing ye (Folium Isatidis) 10g
Gan Cao (Radix et Rhizoma Glycyrrhizae) 5g

[Method]

Decoct with water to get 400ml, one formula a day. Drink the decoction in two divided doses, once in the morning and once in the evening.

2.3 Moderate cases**2.3.1 Damp toxin stagnating in the lung****[Signs and symptoms]**

Fever, cough with scanty or yellow phlegm, chest tightness, shortness of breath, abdominal distension, and constipation with difficult defecation. The tongue is dark red and enlarged with a yellow, greasy or dry yellow coating. The pulse is slippery and rapid or wiry and slippery.

[Recommended formula]

Ma Huang (Herba Ephedrae) 6g
Cao Guo (Fructus Tsaoako) 10g
Xing Ren (Almond) 15g
Shi Gao (Gypsum) 30g
Yi Yi Ren (Semen Coicis) 30g
Cang Zhu (Rhizoma Atractylodis) 10g
Huo Xiang (Herba Agastachis) 15g
Qing Hao (Herba Artemisiae Annuae) 12g
Hu Zhang (Rhizoma Polygoni Cuspidati) 20g
Ma Bian Cao (Herba Verbenae) 30g

Gan Lu Gen (dried Rhizoma Phragmitis) 30g
Ting Li Zi (Semen Lepidii) 15g
Ju Hong (Exocarpium Citri Rubrum) 15g
Gan Cao (Radix et Rhizoma Glycyrrhizae) 10g

[Method]

Decoct with water to get 400ml, one formula a day. Drink the decoction in two divided doses, once in the morning and once in the evening.

2.3.2 Cold-dampness obstructing the lung**[Signs and symptoms]**

Low-grade fever, a feverish sensation without a high temperature, dry coughs with scanty phlegm, lassitude, fatigue, chest tightness, and epigastric fullness. Alternatively, absence of fever, nausea, vomiting, and loose stools may be present. The tongue is pale or pale red with a white or white and greasy coating. The pulse is soft.

[Recommended formula]

Cang Zhu (Rhizoma Atractylodis) 15g
Chen Pi (Pericarpium Citri Reticulatae) 10g
Hou Po (Cortex Magnoliae Officinalis) 10g
Huo Xiang (Herba Agastachis) 10g
Cao Guo (Fructus Tsaoako) 6g
Sheng Ma Huang (Herba Ephedrae) 6g
Qiang Huo (Rhizoma et Radix Notopterygii) 10g
Sheng Jiang (Fresh Ginger) 10g
Bing Lang (Semen Arecae) 10g

[Method]

Decoct with water to get 400ml, one formula a day. Drink the decoction in two divided doses, once in the morning and once in the evening.

2.4 Severe cases**2.4.1 Epidemic toxin blocking the lung****[Signs and symptoms]**

Fever with a red face, cough with scanty, yellow and sticky phlegm, chest tightness, shortness of breath, lassitude, fatigue, a dry, bitter and sticky mouth, nausea, loss of appetite, difficult defecation, and dark, scanty urine. Alternatively, blood-stained phlegm may be present. The tongue is red with a yellow, greasy coating. The pulse is slippery and rapid.

[Recommended formula] *Huashi Baidu* (Dampness-Resolving & Toxin-Removing) formula

Ma Huang (Herba Ephedrae) 6g

Xing Ren (Almond) 9g
Shi Gao (Gypsum) 15g
Gan Cao (Radix et Rhizoma Glycyrrhizae) 3g
Huo Xiang (Herba Agastachis) 10g (decoct later)
Hou Po (Cortex Magnoliae Officinalis) 10g
Cang Zhu (Rhizoma Atractylodis) 15g
Cao Guo (Fructus Tsaoako) 10g
Fa Ban Xia (Rhizoma Pinelliae Praeparatum) 9g
Fu Ling (Poria) 15g
Da Huang (Radix et Rhizoma Rhei) 5g (decoct later)
Huang Qi (Radix Astragali) 10g
Ting Li Zi (Semen Lepidii) 10g
Chi Shao (Radix Paeoniae Rubra) 10g

[Method]

Decoct with water to get 100-200 ml, one or two formulas a day. Drink the decoction in two-4 divided doses or feed via a nasal tube.

2.4.2 Flaring heat in both qi and ying phases**[Signs and symptoms]**

High-grade fever with excessive thirst, chest tightness, shortness of breath, delirium, unconsciousness, and blurred vision. Alternatively, skin rashes (in patches), vomiting blood, nosebleed, and convulsions of the four limbs may also be present. The tongue is crimson with scanty or no coating. The pulse is deep, thready and rapid or floating, big and rapid.

[Recommended formula]

Shi Gao (Gypsum) 30-60g (decoct first)
Zhi Mu (Rhizoma Anemarrhenae) 30g
Sheng Di (Radix Rehmanniae) 30-60g
Shui Niu Jiao (Cornu Bubali) 30g (decoct first)
Chi Shao (Radix Paeoniae Rubra) 30g
Xuan Shen (Radix Scrophulariae) 30g
Lian Qiao (Fructus Forsythiae) 15g
Dan Pi (Cortex Moutan) 15g
Huang Lian (Rhizoma Coptidis) 6g
Zhu Ye (Herba Lophatheri) 12g
Ting Li Zi (Semen Lepidii) 15g
Gan Cao (Radix et Rhizoma Glycyrrhizae) 6g

[Method]

Decoct Shi Gao (Gypsum) and Shui Niu Jiao (Cornu Bubali) with water first and then add the rest of the ingredients to decoct and get 100-200 ml, one formula a day. Drink the decoction in two-4 divided doses.

[Recommended Chinese patent medicine]

Name	Ingredients
Xiyanping injection	sulfonated andrographolide
Xuebijing injection	Hong Hua (Flos Carthami), Chi Shao (Radix Paeoniae Rubra), Chuan Xiong (Rhizoma Chuanxiong), Dan Shen (Radix et Rhizoma Salviae Miltiorrhizae) and Dang Gui (Radix Angelicae Sinensis).
Reduning injection	Qing Hao (Herba Artemisiae Annuae), Jin Yin Hua (Flos Lonicerae Japonicae), and Zhi Zi (Fructus Gardeniae).
Xingnaojing injection	Moschus, borneol, Fructus Gardeniae, etc.

Note: One or two injections can be used together, in combination with traditional Chinese medicine decoction.

2.4 Critical cases

Internal blocking causing external collapse

[Signs and symptoms]

Difficulty breathing, panting upon exertions (mechanical ventilation may be required), unconsciousness, restlessness, sweating, and cold limbs. The tongue is dark purple with a thick, greasy or dry coating. The pulse is floating, big and rootless.

[Recommended formula]

Take Suhexiang Wan (Storax Pill) or Angong Niu Huang Wan (Peaceful Palace Bovine Bezoar Pill) with the decoction of Ren Shen (Radix et Rhizoma Ginseng) 15g, Hei Fu Zi (Radix Aconiti Lateralis Praeparata) 10g, and Shan Zhu Yu (Fructus Corni) 15g.

[Modifications]

- For abdominal distension, constipation or difficult defecation following mechanical ventilation, use 5-10g of Da Huang (Radix et Rhizoma Rhei).
- For patient-ventilator asynchrony (PVA), 5-10g of Da Huang (Radix et Rhizoma Rhei) and Mang Xiao (Natrii Sulfas) can be used in combination with sedative and muscle relaxants.

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[Recommended Chinese patent medicine]

Name	Ingredients
Xuebijing injection	Hong Hua (Flos Carthami), Chi Shao (Radix Paeoniae Rubra), Chuan Xiong (Rhizoma Chuanxiong), Dan Shen (Radix et Rhizoma Salviae Miltiorrhizae) and Dang Gui (Radix Angelicae Sinensis).
Reduning injection	Qing Hao (Herba Artemisiae Annuae), Jin Yin Hua (Flos Lonicerae Japonicae), and Zhi Zi (Fructus Gardeniae).
Xingnaojing injection	Moschus, borneol, Fructus Gardeniae, etc.
Shenfu injection	Hong Shen (Radix et Rhizoma Ginseng Rubra) and Hei Fu Zi (Radix Aconiti Lateralis Praeparata Nigrum)
Shengmai injection	Hong Shen (Radix et Rhizoma Ginseng Rubra), Mai Dong (Radix Ophiopogonis) and Wu Wei Zi (Fructus Schisandrae Chinensis).
Shenmai injection	Hong Shen (Radix et Rhizoma Ginseng Rubra) and Mai Dong (Radix Ophiopogonis)

Note: One or two injections can be used together, in combination with traditional Chinese medicine decoction.

[Recommended use of Chinese medicine injections for severe and critically ill cases]

It's worth noting that traditional Chinese medicine injections should start from a smaller dose and gradually increase.

- For viral infection or combined viral and bacterial infection, add 100mg Xiyanping injection (bid) to 250ml sodium chloride 0.9%; or add 20 ml Reduning injection to 250ml sodium chloride 0.9%.
- For high-grade fever with disturbance of consciousness, add 20ml (bid) of Xingnaojing injection to 250ml sodium chloride 0.9%.
- For systemic inflammatory response syndrome and/or multiple organ failure (MOF), add 100ml (bid) Xuebijing injection to 250ml sodium chloride 0.9%.
- For immunosuppression, add 100ml Shenmai injection or 20-60ml (bid) Shengmai injection to 250ml sodium chloride 0.9%.

2.6 Convalescence

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2.6.1 Qi deficiency of the lung and spleen

[Signs and symptoms]

Shortness of breath, lassitude, fatigue, a poor appetite, nausea, vomiting, abdominal fullness, weak bowel movements, and a sense of incomplete evacuation. The tongue is pale and swollen with a white, greasy coating.

[Recommended formula]

Fa Ban Xia (Rhizoma Pinelliae Praeparatum) 9g
Chen Pi (Pericarpium Citri Reticulatae) 10g
Dang Shen (Radix Codonopsis) 15g
Zhi Huang Qi (Radix Astragali Praeparata cum Melle) 30g
Chao Bai Zhu (Rhizoma Atractylodis Macrocephalae Praeparata) 10g
Fu Ling (Poria) 15g
Huo Xiang (Herba Agastachis) 10g
Sha Ren (Fructus Amomi) 6g (decoct later)
Gan Cao (Radix et Rhizoma Glycyrrhizae) 6g

[Method]

Decoct with water to get 400ml, one formula a day. Drink the decoction in two divided doses, once in the morning and once in the evening.

2.6.2 Deficiency of qi and yin

[Signs and symptoms]

Fatigue, shortness of breath, a dry mouth, thirst, palpitations, profuse sweating, a poor appetite, a low-grade or no fever, and dry coughs with scanty phlegm. The tongue is dry. The pulse is thready or weak.

[Recommended formula]

Nan Sha Shen (Radix Adenophorae) 10g
Bei Sha Shen (Radix Glehniae) 10g
Mai Dong (Radix Ophiopogonis) 15g
Xi Yang Shen (American ginseng) 6g
Wu Wei Zi (Fructus Schisandrae Chinensis) 6g
Shi Gao (Gypsum) 15g
Dan Zhu Ye (Herba Lophatheri) 10g
San Ye (Folium Mori) 10g
Lu Gen (Rhizoma Phragmitis) 15g
Dan Shen (Radix et Rhizoma Salviae Miltiorrhizae) 15g
Gan Cao (Radix et Rhizoma Glycyrrhizae) 6g

[Method]

Decoct with water to get 400ml, one formula a day. Drink the decoction in two divided doses, once in the morning and once in the evening.

9

新冠肺炎三药介绍

一、金花清感颗粒

金花清感颗粒是在 2009 年 H1N1 流行时研发的治疗流感的新药，由《伤寒论》的麻杏石甘汤和《温病条辨》中的银翘散方组成，主要功效是疏风宣肺，清热解毒，该药主要用于治疗发热轻、头疼重的新冠患者。治疗轻度和普通型的新冠肺炎患者疗效确切，主要体现在退热时间缩短、症状改善等情况下，轻症患者转重的比例也有所下降。

二、连花清瘟胶囊

连花清瘟胶囊是在治疗非典时研制出的一张处方，主要功效是清瘟解毒、宣肺泻热，该药偏重于治疗发热重、大便干的新冠患者。相关研究表明，连花清瘟胶囊针对新冠肺炎患者的主要临床症状消失率、临床症状持续时间、肺部影像学好转率、临床治愈率均明显优于对照组。

三、血必净注射液

血必净注射液是以古方血府逐瘀汤为基础研制的中药注射液，由红花、赤芍、川芎、丹参、当归等活血化瘀药组成，具有化瘀解毒功效，可用于因感染诱发的全身炎症反应综合征及多器官功能障碍综合征，作为多靶点的治疗药物，尤其在重症肺炎救治方面有一定优势。

Traditional Chinese Medicine in the Treatment of Patients Infected with 2019-New Coronavirus (SARS-CoV-2): A Review and Perspective

(Reprinted Excerpt)

Yang Yang, Md Sahidul Islam, Jin Wang, Yuan Li and Xin Chen

Institute of Chinese Medical Sciences, University of Macau, Macau SAR 999078, China

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Editor's note: with the authors' permission, we reprint part of this newly published long article on recent situation in China about TCM treatment for COVID-19. The full text of the article is available from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7098036/>

Abstract

Currently, Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2, formerly known as 2019-nCoV, the causative pathogen of Coronavirus Disease 2019 (COVID-19)) has rapidly spread across China and around the world, causing an outbreak of acute infectious pneumonia. No specific anti-virus drugs or vaccines are available for the treatment of this sudden and lethal disease. The supportive care and non-specific treatment to ameliorate the symptoms of the patient are the only options currently. At the top of these conventional therapies, greater than 85% of SARS-CoV-2 infected patients in China are receiving Traditional Chinese Medicine (TCM) treatment. In this article, relevant published literatures are thoroughly reviewed and current applications of TCM in the treatment of COVID-19 patients are analyzed. Due to the homology in epidemiology, genomics, and pathogenesis of the SARS-CoV-2 and SARS-CoV, and the widely use of TCM in the treatment of SARS-CoV, the clinical evidence showing the beneficial effect of TCM in the treatment of patients with SARS coronaviral infections are discussed. Current experiment studies that provide an insight into the mechanism underlying the therapeutic effect of TCM, and those studies identified novel naturally occurring compounds with anti-coronaviral activity are also introduced.

Key words: SARS-CoV-2, Traditional Chinese Medicine (TCM), coronavirus pneumonia

Traditional Chinese Medicine in the treatment of patients infected with SARS-CoV: clinical evidence

Application of TCM in the treatment of SARS-CoV-2 is largely inspired by the treatment of SARS caused by outbreak of SARS coronavirus (SARS-CoV) in the late of 2002 in the Guangdong Province of China which spread rapidly during the 2003, with the cumulative number worldwide of over 8,000 ⁴¹⁻⁴³. Ranging from case reports, case series, controlled observational studies and randomized clinical trials, clinical studies aiming to examine the effect of TCM on SARS have been carried out and reported. There are quite compelling evidences support the notion that TCM has beneficial effect in the treatment or prevention of SARS. For example, the rate of fatality in Hong Kong and Singapore was approximately 18%, while the rate for Beijing was initially more than 52% until the 5th of May and decreased gradually to 4%-1% after the 20th of May in 2003. The dramatic reduced fatality from late May in Beijing was believed to be associated with the use of TCM as a supplement to the conventional therapy ⁴⁴. Lau and colleagues reported that, during SARS outbreak, 1063 volunteers including 926 hospital workers and 37 laboratory technicians working in high-risk virus laboratories used a TCM herbal extract, namely *Sang Ju Yin* plus *Yu Ping Feng San*. Compared with the 0.4% of infection in the control group, none of TCM users infected. Furthermore, there was some evidence that *Sang Ju Yin* plus *Yu Ping Feng San* could modulate T cells in a manner to enhance host defense capacity ^{45, 46}. In a controlled clinical study, the supplementary treatment with TCM resulted in marked improvement of symptoms and shortened the disease course ⁴⁷. The clinical beneficial effect of TCM appears to be supported by laboratory studies. For example, a high-profile research published in the *Lancet* reported that glycyrrhizin, a major active constituent *liquorice root* which is the most frequently used Chinese herb, potently inhibited the replication of clinical isolates of SARS virus ⁴⁸. Another independent study confirmed the antiviral activity of glycyrrhizin by plaque reduction assays and this study found that another Chinese herbal compound baicalin also had the anti-SARS activity ⁴⁹. Furthermore, Wang *et al.* found MOL376, a compound derived from TCM, may become a lead compound for SARS therapy by inhibition of cathepsin L, a target for the treatment of SARS ⁵⁰.

There is a myriad of literature on TCM treatments for SARS published after the SARS epidemic in China. A critical

analysis of these publications would be useful to confirm the beneficial effect of TCM. Liu *et al.* systematically reviewed eight randomized controlled trials, and concluded that, by combination with conventional medicine, TCM showed the beneficial effects such as decrease of mortality and relief of symptom, as well as control of fungal infections in patients with SARS. However, the evidence is not sufficient enough due to the poor quality of methodology used in the trials ¹³. Leung analyzed 90 peer-reviewed papers with reasonable quality from 130 publications and concluded that TCM used together with conventional treatment had some positive effects, including better control of fever, quicker clearance of chest infection and other symptoms. However, such beneficial effect of TCM is not conclusive and more high-quality clinical studies are required ¹⁵. In another thorough literature analysis, Liu and colleagues concluded that there was no benefit of adjuvant treatment with TCM in terms of mortality ³⁹. Due to the lack of high quality TCM trials and biases that influenced the validity of results, Wu and colleagues suggested to re-run clinical trials of TCM for the treatment of acute respiratory tract infections (ARTIs) ⁵¹.

Traditional Chinese Medicine used in the treatment of SARS-CoV-2-infected patients: the current situations

TCM is highly valued by the government of China in their campaign to contain and eradicate SARS-CoV-2. For example, Health Commission in 26 provinces have officially declared that TCM should be used in combination with conventional medicine in the treatment of COVID-19 patients. On 17, February, National Health Commission (NHC) of the People's Republic of China reported that 60,107 confirmed COVID-19 patients (85.20% of total confirmed cases) had been treated with TCM ⁸⁷. As for March 1, 2020, a total of 303 ongoing clinical trials aiming to evaluate the efficacy and safety of treatments for CoV-19 patients have been launched in China. Among them, 50 trials (16.5%) are about the use of TCM, including 14 cases (4.6%) to examine the effect of combined treatment with TCM and Western medicine. In 22 TCM trials (7.3%), the effect of self-made herbal preparations such as *Xin Guan-1 Formula*, *Xin Guan-2 Formula* and *Qing Yi-4* are examined. In another 14 TCM trials (4.6%), commercially available TCM products such as *Tan Re Qing Injection* and *Lian Hua Qing Wen Capsule* are studied (Table 4).

Table 4

Ongoing TCM Clinical Trials for the treatment of SARS-CoV-2 infection

Registration number	Design type	Title	TCM herbal medicine	Sample size	Phase
ChiCTR2000029432	CCT	A real world study for the efficacy and safety of large dose Tanreqing Injection in the treatment of patients with novel coronavirus pneumonia (COVID-19)	<i>Tan Re Qing Injection</i>	72	4
ChiCTR2000029434	RCT	A randomized, open-label, blank-controlled trial for Lian-Hua Qing-Wen Capsule/Granule in the treatment of novel coronavirus pneumonia (COVID-19)	<i>Lian Hua Qing Wen Capsule/Granule</i>	400	4
ChiCTR2000029487	CCT	Clinical study for Gu-Biao Jie-Du-Ling in preventing of novel coronavirus pneumonia (COVID-19) in children	<i>Gu Biao Jie Du Ling</i>	200	0
ChiCTR2000029589	CCT	An open, prospective, multicenter clinical study for the efficacy and safety of Reduning injection in the treatment of novel coronavirus pneumonia (COVID-19)	<i>Re Du Ning Injection</i>	60	0
ChiCTR2000029605	RCT	A randomized, open-label, blank-controlled, multicenter trial for Shuang-Huang-Lian oral solution in the treatment of novel coronavirus pneumonia (COVID-19)	<i>Shuang Huang Lian Oral Liquid</i>	400	4
ChiCTR2000029780	RCT	A multicenter, randomized, open, controlled trial for the efficacy and safety of Shen-Qi Fu-Zheng injection in the treatment of novel coronavirus pneumonia (COVID-19)	<i>Shen Qi Fu Zheng Injection</i>	160	4
ChiCTR2000029781	RCT	A multicenter, randomized, open and controlled trial for the efficacy and safety of Kang Bing Du Granules	<i>Kang Bing Du Granules</i>	160	4

Registration number	Design type	Title	TCM herbal medicine	Sample size	Phase
ChiCTR2000029822	RCT	Kang-Bing-Du granules in the treatment of novel coronavirus pneumonia (COVID-19) A randomized controlled trial for honeysuckle decoction in the treatment of patients with novel coronavirus (COVID-19) infection	<i>Jin Yin Hua Tang</i>	110	0
ChiCTR2000029991	RCT	A randomized, open-label, controlled trial for the safety and efficiency of Kesuting syrup and Keqing capsule in the treatment of mild and moderate novel coronavirus pneumonia (COVID-19)	<i>Ke Su Ting Syrup / Ke Qing Capsule</i>	72	4
ChiCTR2000030043	RCT	Shen-Fu injection in the treatment of severe novel coronavirus pneumonia (COVID-19): a multicenter, randomized, open-label, controlled trial	<i>Shen Fu Injection</i>	300	4
ChiCTR2000030117	RCT	A multicenter, randomized, open, parallel controlled trial for the evaluation of the effectiveness and safety of Xiyanping injection in the treatment of common type novel coronavirus pneumonia (COVID-19)	<i>Xi Yan Ping Injection</i>	348	4
ChiCTR2000030255	RCT	Efficacy and safety of Jing-Yin Granule in the treatment of novel coronavirus pneumonia (COVID-19) wind-heat syndrome	<i>Jing Yin Granule</i>	300	4
ChiCTR2000030388	RCT	Efficacy and safety of Xue-Bi-Jing injection in the treatment of severe cases of novel coronavirus pneumonia (COVID-19)	<i>Xue Bi Jing Injection</i>	60	0
ChiCTR2000029813	RCT	Clinical Trial for Tanreqing Capsules in the Treatment of Novel Coronavirus Pneumonia (COVID-19)	<i>Tan Re Qing Capsules</i>	72	0

Notes: RCT: randomized controlled trial; CCT: controlled clinical trial.

To date, NHC has published 6 editions Guidelines of Diagnosis and Treatment for COVID-19 ⁸⁸. Since the fourth versions, different herbal medicines used in TCM system has been recommended for the treatment of COVID-19, based on the stage of disease and symptom differentiation ⁸⁹. According to the latest edition of Guideline ⁸⁸, following multiple component Chinese herbal products are recommended for the patients in the medical observation period, presumably as a preventive measure: *Huo Xiang Zheng Qi Shui*, *Lian Hua Qing Wen Capsule*, *Shu Feng Jie Du Capsule* and *Jin Hua Qing Gan Granule*. In the clinical treatment period, *Qing Fei Pai Du Tang*, *Xi Yan Ping Injection*, *Xue Bi Jing injection*, *Re Du Ning Injection*, *Tan Re Qing Injection*, *Xing Nao Jing Injection* and some other Chinese medicine formulae should be selected ⁹⁰. In addition, for the patients in critical condition, *Shen Fu Injection*, *Sheng Mai Injection*, *Shen Mai Injection*, *Su He Xiang Pill* and *An Gong Niu Huang Pill* should be administered (Table 5)

Table 5

TCM recommended by 6th editions Guidelines of Diagnosis and Treatment for COVID-19 ⁸⁸.

Stage of disease	Symptom	Recommended Chinese patent medicine
Medical observation period	Fatigue with gastrointestinal discomfort	<i>Huo Xiang Zheng Qi Shui</i>
	Fatigue with fever	<i>Lian Hua Qing Wen Capsule</i> , <i>Shu Feng Jie Du Capsule</i> , <i>Jin Hua Qing Gan Capsule</i>
Clinical	Mild cases	<i>Qing Fei Pai Du Tang</i>

Stage of disease	Symptom	Recommended Chinese patent medicine
treatment period (Confirmed patients)	General cases	<i>Qing Fei Pai Du Tang</i>
	Several cases	<i>Xi Yan Ping Injection, Xue Bi Jing Injection, Re Du Ning Injection, Tan Re Qing Injection, Xing Nao Jing Injection, Qing Fei Pai Du Tang</i>
	Critical cases	<i>Xue Bi Jing Injection, Re Du Ning Injection, Tan Re Qing Injection, Shen Fu Injection, Sheng Mai Injection, Shen Mai Injection, Su He Xiang Pill, An Gong Niu Huang Pill</i>

Through analysis of the frequency of TCM used in 23 provinces, Luo, et al. ³⁷ concluded that *Astragalus membranaceus*, *Glycyrrhizae uralensis*, *Saposhnikovia divaricata*, *Rhizoma Atractylodis Macrocephalae*, *Lonicerae Japonicae Flos*, *Fructus forsythiae*, *Atractylodis Rhizoma*, *Radix platycodonis*, *Agastache rugosa*, and *Cyrtomium fortune J. Sm* were 10 most commonly used Chinese herbs in the treatment of COVID-19. Xu, et al. ⁹¹ reported that *Astragalus membranaceus* and *Yu Ping Feng* were used in the 13 prevention programs (in Beijing, Tianjin, et al.) for “reinforcing vital qi”, a terminology used in TCM that is similar to boosting host defense capacity. *Ophiopogon japonicas* and *Scrophularia ningpoensis* are TCM herbs which were most frequently used for “nourishing yin” in northern China, while *Atractylodis Rhizoma*, *Agastache rugosa* and other Chinese medicinal herbs with the property of “aromatic dehumidification” were commonly used in southern China (Table 6).

Table 6

Frequently used TCM herbs for the Prevention of COVID-19 infection

Reported by	Herbs (Latin name)	Herbs (Chinese Pin Yin)	Applicable regions
Luo, et al. ³⁷	<i>Astragalus membranaceus</i>	Huangqi	23 provinces covered Northeast, North, Central (including Wuhan), South, East, Northwest, and Southwest China.
	<i>Glycyrrhizae uralensis</i>	Gancao	
	<i>Saposhnikovia divaricata</i>	Fangfeng	
	<i>Rhizoma Atractylodis Macrocephalae</i>	Baizhu	
	<i>Lonicerae Japonicae Flos</i>	Jinyinhua	
	<i>Fructus Forsythiae</i>	Lianqiao	
	<i>Atractylodis Rhizoma</i>	Cangzhu	
	<i>Radix platycodonis</i>	Jiegeng	
	<i>Agastache rugosa</i>	Huoxiang	
	<i>Cyrtomium fortune J. Sm</i>	Guanzhong	
Xu, et al. ⁹¹	<i>Astragalus membranaceus</i>	Huangqi	Beijing, Tianjin, Shandong, Shaanxi, Gansu, Hebei, Shanxi, Henan, Hubei, Jiangxi, Hunan, and Yunnan
	<i>Atractylodis Rhizoma</i>	Cangzhu	Five regions in southern China (Hubei, Jiangxi, Hunan, Yunnan, and Wuhan)
	<i>Eupatorii Herba</i>	Peilan	
	<i>Agastache rugosa</i>	Huoxiang	
	<i>Ophiopogon japonicas</i>	Maidong	Eight regions in northern China (Beijing, Tianjin, Hebei, Henan, Shaanxi, Shanxi, Gansu, and Shandong)
	<i>Scrophularia ningpoensis</i>	Xuanshen	
	<i>Rhizoma phragmitis</i>	Lugen	
	<i>Adeionophora stricta Miq</i>	Shashen	
	<i>Dendrobium nobile Lindl.</i>	Shihu	

According to the report of National Administration of Traditional Chinese Medicine, up to February 5th, 2020, 214 COVID-19 patients were treated with *Qing Fei Pai Du Tang* in Shanxi, Hebei, Heilongjiang and Shaanxi Provinces

with overall effective rate $\geq 90\%$. Among them, the symptoms of majority of patients ($\geq 60\%$) were markedly improved, while illness of others (30%) was stabilized ⁹². After that, 701 COVID-19 patients were treated with *Qing Fei Pai Du Tang* in 10 provinces in China. The result showed that 130 patients (18.5%) were completely cured after treatment. The treatment also resulted in the disappearance of characteristic symptoms of COVID-19 such as fever and cough in 51 patients (7.27%). In addition, symptom improvement or stabilization were observed in 268 patients (38.2%), and in 212 patients (30.2%), respectively ⁸⁷. Yao, *et al.* and Lu, *et al.* ^{93, 94} retrospectively analyzed the clinical efficacy of *Lian Hua Qing Wen Capsule* in treatment of confirmed and suspected COVID-19 patients. The results indicated that this herbal product could markedly relieve major symptoms such as fever and cough and had the capacity to promote the recovery.

Some patients with mild illness in the early stage could suddenly progress to severe disease, and eventually died due to septic shock with multiple organ dysfunction syndrome (MODS), which was associated with cytokine storm ⁹⁵. There is compelling evidence that some TCM herbal products or its components have potent immunosuppressive effects, as shown by our own and other's studies ^{79, 96-103}. For example, Wang, *et al.* ¹⁰⁴ reported that *Shen Fu Injection* could inhibit the lung inflammation and decrease the levels of IL-1 β , IL-6 and other cytokines. Chang, *et al.* ¹⁰⁵ reported that *Re Du Ning Injection* could markedly reduce the levels of IL-1 β , TNF- α , IL-8, IL-10, and some other cytokines of LPS-induced model of acute lung injury in rats. We recently reported that tetrandrine, a compound isolated from an anti-rheumatic Chinese herb, could potentially inhibit proinflammatory Th1, Th2 and Th17 responses in LPS-challenged mice ¹⁰⁶. Therefore, TCM with the capacity to inhibit cytokine storm and its devastating consequences may be harnessed in the treatment of severe COVID-19 patients.

Currently, the laboratory study on the effect of TCM is apparently lagging behind the clinical application of TCM in the treatment of COVID-19 patients. Nevertheless, some scientists have started to examine the effect of TCM products or its components on SARS-CoV-2 in their laboratories. For example, an *in vitro* study showed that *Shuang Huang Lian Oral Liquid* had the inhibitory effect on SARS-CoV-2 ⁷⁸. However, its clinical efficacy and safety for the treatment of COVID-19 patients has not been evaluated. We noticed that this TCM product was not recommended by HNC's Guideline ⁸⁹. Same as SARS-CoV, SARS-CoV-2 uses receptor ACE2 for the cellular entrance ⁸. Theoretically, blockade of ACE2 can prevent the infection of SARS-CoV-2. Chen and Du thus performed the molecular docking study and they found that TCM-derived compounds, including as baicalin, scutellarin, hesperetin, glycyrrhizin and nicotianamine could interact with ACE2 ¹⁰⁷. Therefore, these compounds as well as herbs containing these ingredients may have the capacity to inhibit the infection of SARS-CoV-2. We anticipate more experiment studies showing anti-SARS-CoV-2 activity of TCM or its components will be published in the near future.

Closing remarks

TCM has accumulated thousand-of-year's experiences in the treatment of pandemic and endemic diseases. Providing complementary and alternative treatments are still urgently needed for the management of patients with SARS-CoV-2 infection, experiences in TCM is certainly worth learning. Fighting against current epidemics also provide an opportunity to test the true value of TCM in treating emerging contagious diseases. Randomized, double-blind and placebo-controlled studies is the best way to provide the most reliable evidence for a therapy, including TCM. It is encouraging that the controlled clinical studies to evaluate the efficacy of TCM in the treatment of SARS-CoV were conducted and reported. However, the most of these studies were found to be poorly designed and the results could lead to potential biases in evaluating the effectiveness of TCM treatment ¹³. Hopefully, current clinical study to evaluate the effect of TCM on COVID-19 will use more strict protocols, concealment of allocation, and double-blinding, in order to ensure the compliance of international acceptable standards. Furthermore, standardized products of TCM, rather than self-prepared formulations, should be used in clinical study. Experiment study may be able to elucidate the mechanism underlying the therapeutic effect of TCM in the treatment of COVID-19. The further study of TCM may lead to the identification of novel anti human coronavirus compounds that may eventually prove to be useful in the treatment of SARS-CoV-2 or other emerging fatal viral diseases as conventional therapeutic agents. (Please read the original article for the reference list)

清肺排毒汤

清肺排毒汤是来自张仲景《伤寒杂病论》的经典名方组合，主要成分由以下 21 味中药组成：麻黄、炙甘草、杏仁、生石膏、桂枝、泽泻、猪苓、白术、茯苓、柴胡、黄芩、姜半夏、生姜、紫菀、冬花、射干、细辛、山药、枳实、陈皮、藿香。

清肺排毒汤适用于新冠肺炎轻型、普通型、重型、危重型患者。主要功效为宣肺透邪、清热化湿、健脾化饮。改善发热、咳嗽、乏力等症状，见效较快且明显，有效促进重症患者肺影像学改善、肺部病灶吸收。

中医预防新冠肺炎方法

聂卉 韩永刚 徐淑敏 解余宏

说明：此文仅供中医师临床参考，以及自我防护参考，非中医师请在中医师的指导下应用。

《黄帝内经·素问·刺法论》曰：“黄帝曰：余闻五疫之至，皆相染易，无问大小，病状相似，不施救疗，如何可得不相移易者？岐伯曰：不相染者，正气存内，邪不可干，避其毒气”。从这段经文中可以看到，针对传染性疾病，从预防的角度来讲，我们每个人一方面要从外因，注重“避其毒气”；另一方面要从内因，讲求“正气存内”。内外两方面同时着手，可以最大程度上起到预防疾病的效果。

第一部分 避其疫气方法

此次新冠病毒已定为“疫疠之气”，所以，介绍一下方便有效而可行性的中医外用预防方法。

一、艾烟消毒法

在家可以点支艾条给房间消毒 5-10 分钟。切记，要选好的艾条，好艾条燃烧的烟对空气有很好的杀菌作用，并且对肺炎球菌、流感杆菌和金黄色葡萄球菌等流感病毒都有很好的抑制作用。

艾叶烟熏预防疾病从古代起就有着广泛的应用，如：东晋著名的医药学家葛洪在《肘后备急方》中就介绍了用艾叶烟熏消毒预防瘟疫传染的方法：在瘟疫流行时“以艾灸病人床四角，各一壮，令不相染”，而且认为用这种方法预防疫病传染，效果“极佳”。

二、苍术熏烟法

苍术在中国古代历次疫情中，被作为“防疫”第一要药的实战验证。苍术，古称赤术，《本草纲目》李时珍先生言“仲景辟一切恶气，用赤术同猪蹄甲烧烟”。

北大深圳医院在非典期间真实运用苍术消毒的“实操”！3 个月，用了 850 公斤苍术，该院非典期间“无一例院内感染”！

（一）苍术消毒的优点：

- 1) 苍术消毒是利用烟雾，属于气凝胶的一种，也就是说，在一个空间内消毒，是不留任何死角的，只要空气能到的地方，都可以消毒杀菌抗病毒！
- 2) 没有任何副作用，消毒同时，不用挪动病员到其他房间，对人无任何毒副作用，
- 3) 消毒效果，胜于紫外线，并且在消毒后的数小时内，微生物繁殖速度远低于紫外线的消杀结果。

（二）具体操作

- 1) 买生苍术，100 平米房子 10—20g，每天熏一次 10-20 分钟即可，买回来的苍术如果不好点燃是太湿

了，可以锅里炒一下脱脱水。2) 点着了，看见明显火头，吹灭明火，然后，开始吹，消毒防疫就靠烟，没烟没效果，放心，这种烟很香，也没有 PM2.5，或用几滴酒精助燃。

三、口含蒜泥式呼吸法

操作步骤

- 1、取蒜瓣 1-2 瓣，捣成蒜泥；
- 2、把蒜泥放在汤匙里，上覆一锡箔，避免口腔粘膜跟蒜泥直接接触；
- 3、将汤匙含入口中，以嘴巴吸气、鼻孔呼气的方式，连续做深呼吸 10-15 分钟；注意：每次嘴巴吸气时，均需吸满并吞咽，以确保大蒜辣素被吸入呼吸道深处直达肺部；然后再经鼻孔缓慢呼出，以尽可能延长大蒜辣素在肺部和呼吸道内的停留时间。
- 4、10-15 分钟后，将汤匙自口中取出，蒜泥丢弃即可。喜食大蒜的人亦可将蒜泥吃掉。

上述过程中或产生大量鼻涕、痰等排泄物，甚至出现一把鼻涕一把眼泪的现象。此种情况下，应坚持呼吸，将鼻涕、痰、眼泪等及时充分排净。

四、佩戴香囊法

香囊又叫香袋、花囊，荷包，是将芳香性中草药碾成细末装入特制布袋中，佩在身上以预防疾病的一种传统民间艺品。香囊里芳香性中药的挥发性气味通过口鼻黏膜、肌肤毛孔、经络穴位，经气血经脉的循行而遍布全身，起到调节气机、疏通经络的作用。

取丁香、藿香、砂仁、蔻仁、苍术、艾叶、肉桂、川芎、荆芥、防风、白芷、薄荷各 10 克，粉碎至 100~200 目。每袋里装 10 克至 20 克药粉，每天挂胸前佩带，晚上睡觉时放置枕边。香囊中的药末最好十天左右更换一次，或一个月换一次，以保持药效。或草药直接装入香囊。

（第一部分英国韩永刚博士编辑）

第二部分 正气存内方法

中药口服，分不同体质，建议可配置中药方剂或粉剂口服预防新冠肺炎，以下方药建议是在合格中医师指导下应用，并且计量都适用成人，儿童要在中医师指导下应用。除中药外我们还介绍了针灸，拔罐，艾灸，太极练功法预防感染新冠病毒，这些方法主要是提高机体的免疫力抗击疫毒。

一 中药应用于正常体质之人：

1. 北京中医药大学姜良铎教授参考方：生黄芪 9 克，

北沙参 9 克，知母 9 克，连翘 12 克，苍术 9 克，桔梗 6 克。建议这一副方剂可用 2-4 天。

2 根据五运六气配方，由著名经典中医学者潘晓川提供：根据源于内经：“庚午、庚子岁，上少阴火，中太商金运，下阳明金，热化七，清化七，燥化九，所谓正化日也。其化上咸寒，中辛温，下酸温。所谓药食宜也”。《汤液经法》中的经典经方“小补肝汤”：桂皮/桂枝、干姜

五味子各 6 克，大枣三枚。或用食物版“小补肝汤”，生姜柠檬蜂蜜水：生姜 2 份，柠檬 1 份，蜂蜜 1 份。水适量。姜片或姜泥煮水，加入柠檬片、蜂蜜。也可以先煮开水，加入姜片柠檬片，水降温后加入蜂蜜。巧的是，这也是西方治疗流行感冒的方子。疫情期间，体质寒湿、肝气不升之人，都可以喝这个水，辛酸化甘、辛甘化阳，祛寒湿，提高免疫力。

3 湖北省中医院防新型冠状病毒感染的肺炎一号方：苍术 3 克，金银花 5 克，陈皮 3 克，芦根 2 克，桑叶 2 克，生黄芪 10 克，，开水泡，代茶饮，7 天。防新型冠状病毒感染的肺炎二号方：生黄芪 10 克，炒白术 10 克，防风 10 克，贯众 6 克，金银花 10 克，佩兰 10 克，陈皮 6 克，，水煎服，每日一副，分二次，7 天。

二中药应用于阳虚体质之人，由英国聂卉博士提供处方：黄芪 6 克，白术 5 克，茯苓 5 克 炙甘草 3 克，防风 3 克，干姜 3 克，山药 6 克，苍术 5 克，板蓝根 5 克。 建议这一副方剂可用 2-4 天

三 中药应用于阴虚体质之人，由英国聂卉博士提供处方：黄芪 4 克，麦冬 8 克，当归 5 克，北沙参 6 克，白芍 4 克，生地 6 克，山药 5 克，牡丹皮 5 克，

板蓝根 5 克，大青叶 4 克。建议这一副方剂可用 2-4 天

四 针灸预防，由英国聂卉博士提供预防冠状病毒针灸处方：

1 正常人取穴，百会，中府，太渊，曲池，足三里，三阴交，太溪。

2 偏于阳虚体质取穴，百会，肺俞，膏肓，脾俞，肾俞，关元俞，关元，足三里，太溪。

3 偏于阴虚体质取穴，百会，太阳，厥阴俞，膈俞，鱼际，太渊，三阴交，照海。

以上针灸治疗可以一天一次，或一周 1-2 次，手法平补平泻。

五 拔罐预防，由英国聂卉博士提供预防冠状病毒，扶正祛邪，清热解毒，凉血消疫，取穴：大椎，风门，肺俞，天宗，脾俞，胃俞，肾俞 三焦俞，关元俞。一天一次，留罐 3-15 分钟。阴虚之人慎用。

六 艾灸预防，由英国聂卉博士提供预防冠状病毒，扶正祛邪，取穴：内关，外关，中府，云门，中脘，天枢，气海，关元，足三里，太溪。一天一次，每穴灸 1-2 分钟，阴虚之人慎用。

七 太极练功法增加体质预防新冠肺炎，由英国解余宏博士编辑，表演和提供。

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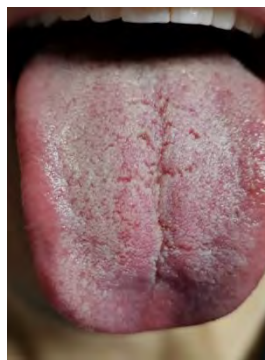
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新冠试刀-新冠疑似病案一例

刘瑞山

患者 xx 男 某大教授 缘于 2 月份接触从国内回来咳嗽咳痰学生引起发热，咳嗽，咳痰伴胸闷乏力。患者自己曾先于网上查到新冠预防方（麻黄附子细辛汤加味方）并要求配药试服试治。后热势越发严重，体温超 38.5 伴头痛加重。西医给与 paracetamol，服药后大汗出，身体更觉虚弱，咳痰头痛益甚，服后体温暂降 1 度多左右，旋即复升超过 38 度。因近日新冠肆虐英伦，病人忧心日增，由朋友推荐邀余诊治。

刻下症：18/3/2020 咳嗽 咳痰，痰呈铁锈色夹有泡沫 量多 胸闷喘促 头痛 口干渴 体温 38.4 舌质红，尖甚；苔白腻 舌中央有裂纹，二便尚正常。



化饮

初步考虑：感染疫毒 邪热雍肺 痰饮积聚

病机：本次疫毒结合苏格兰寒湿气候，考虑本属“寒湿”，郁久化热。热为阳邪，其性炎上，耗伤津液 邪热炼液成痰 故有咳嗽咳痰；邪热壅滞于肺，肺失清宣，故生胸闷；阻滞经络，不通则痛，故有头痛。

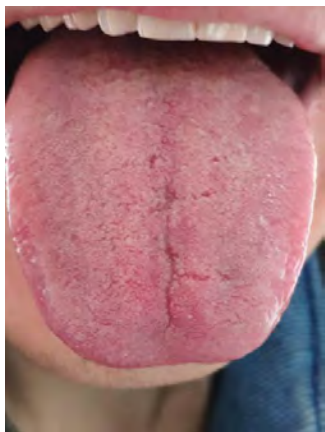
治法：清热解毒 宣肺平喘

方药：清肺排毒汤化裁

药物组成：柴胡 10 黄芩 10 炙甘草 10 生麻黄 6(先煎) 杏仁 10 石膏 30(先煎) 紫苑款 10 冬花 10 佩兰 10 芦根 20

三剂投石问路，临煎加生姜三片。并嘱停用西医退热药及其他药物。方中辛开苦降，芳香化湿 甘寒生津 希冀或可奏功。

19/3 反馈信息 病人接到药后，立即煎煮，恨病吃药，凌晨服药一次，早餐后又加服一次午餐后两点再服。在没吃任何西药情况下体温没超过 37.5 咳嗽频繁，痰仍多，头仍痛，汗出减少，大便溏。病人问是否需要用凉水降温 及晚饭后是否进药？回复：不用凉水继续服药即可。病人通过微信发过来照片显示痰黄而黏稠夹有血丝，考虑因大力咳嗽损伤支气管粘膜之故。



20/3 病人反馈体温在 36.8-37.5 之间，

不再喘促，咳嗽略减，咳痰颜色转浅，大便溏。整体来说身体舒服多了，但有颈部僵痛情况。考虑病人连日咳嗽喘促，津液受损，不能上承，故发颈痛。因病人是高级知识分子，阅读实多。曾读过有便溏病人为重症，易致死，忧心忡忡。回复病人此乃甘寒生津药效之故，肺与大肠相表里，大便一泻，邪热顿减，热势定会迅速下落，放心即可。

三剂药尽，考虑仍循前法，略调处方如下。

柴胡 10 黄芩 10 炙甘草 10 半夏 10 生麻黄 6 杏仁 10 石膏 20 紫苑 10 款冬花 10 藿香 10 羌活 6 瓜蒌 20 葛根 30 茯苓 15 临煎加生姜 6 片 再进三剂。

一日无语（没有消息就是最好的消息） 22/3 反馈感



觉好多了，痰明显减少且变稀，体温 36.5-37，头痛减轻，发照片显示，舌红减，苔变薄，舌中裂纹仍存，痰微黄有泡沫，无明显咽部不适，大便已成型略软，总体按预想发展。

23/3 续服三剂又尽，照片传来，舌红消退，舌苔几乎干净，唯裂纹犹在。诉鼻腔仍有些黄痰，咳出之痰持续变浅，

仍有泡沫。

考虑热毒已去，余热未尽，撤去苦寒之品，酌加宣肺化饮之力

拟小青龙合半夏厚朴汤加减，处方如下

半夏 10 厚朴 10 苏子 20 茯苓 15 生姜 6 片 炙麻黄 3

桂枝 9 细辛 3 炙甘草 10 五味子 3 鱼腥草 15

仍予三剂，以期余热痰涎尽消。煮时加蜂蜜一汤匙以减其燥。

三日无话，26/3 反馈药尽。诸证几乎尽消，体温 36.5-36.8。仅偶尔咳嗽，痰很少，痰白起泡，大便已正常，颈僵已去，头痛微乎其微。照片显示舌质略红，苔薄白 裂纹仍在。

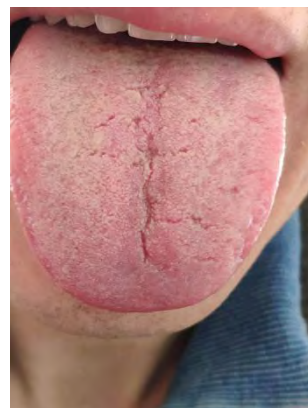
考虑痰热尽去，饮邪仍存。咳少而痰稀白沫，温肺化饮为是。

拟仍循前方调整已尽全功，处方如下

半夏 10 厚朴 10 苏子 20 干姜 9 瓜蒌 10 炙麻黄 3 桂枝 8 细辛 2 炙甘草 18 五味子 3 白芍 10 茯苓 10

本病例能取得不错疗效，治疗过程中全程由陈伟雄老师指导，特此感谢致敬！

思考：病人发病时间段当地不给检测，憾不能确诊，故属疑似。本病案一直都是通过网上照片以及病人主诉做出诊断继而进行治疗，特殊时期因无法面诊和查看病人脉象，做不到“四诊合参”，用药偏颇在所难免，即便如此，仍能取得不错的疗效充分体现了中医“辨证论治”的特色。在药量方面，有些是不符合英国当地法律的。中国工程院院士张伯礼说过“事急从权，不必拘泥药典用量”。在大疫当前，病人有可能转危的情况下，从权处理一方面借鉴前人的记述，另一方面也基于本人以往用药经验，这才是紧急情况下顶住心理压力的柱石。世人尽言“慢郎中”，重症靠边站，在西药暂时无效情况下，六剂草药头痛咳嗽大减，热去喘消。虽无法摸脉去体会“脉静身凉”之境，但中医疗效却是实实在在，岂容中医黑之诋毁？！试看今日之疫，病发之初，没有疫苗，原因未明之时，西医束手。但中医却依然按祖先传下来的法则依法施治，并取得不错的疗效，显示了中医疗法的特色。值此疫情泛滥之时，也正是我们中医大展身手的时候，经过实践的检验，历史的考验，必将为全世界承认并接受，从而让中医走向世界。



化湿败毒方

由国家中医医疗队在早期国家诊疗方案推荐处方基础上，结合金银潭医院临床实践，总结凝练出的核心方。主要成分由以下 14 味中药组成：生麻黄、藿香、生石膏、杏仁、法半夏、厚朴、苍术、草果、茯苓、生黄芪、赤芍、葶苈子、生大黄、甘草。功效为解毒化湿、清热平喘。

化湿败毒方主要适用于新冠肺炎轻型、普通型和重症患者的治疗。可明显缩短核酸转阴时间、平均住院天数，明显改善临床症状、促进理化检查及肺 CT 好转。

医案医话

新冠病毒感染医案三例

张恩勤 英国中医学院

病例 1, xxx, 女, 52 岁, 英国医生, 也是我院针灸班的学生。于 15/3/2020 远程就诊。自述在检查新冠病人时被感染, 核酸检测阳性。感到非常疲劳, 周身酸痛, 恶寒, 头痛, 出汗, 咳嗽, 胸闷, 体温 38 度, 舌质淡, 苔白腻, 脉濡弱。

诊断: 新冠病毒感染。

处方: 人参败毒散加减, 用中药浓缩颗粒。

党参 1 克, 茯苓 0.5 克, 苍术 1 克, 柴胡 1 克, 前胡 1 克, 羌活 1 克, 独活 1 克, 枳壳 1 克, 桔梗 1 克, 甘草 1 克, 苦参 1 克。以上为每日粉剂药量, 日服两次, 给予 2 周药量。

观察: 3 天后症状缓解, 1 周后症状消失, 2 周后已经恢复正常, 目前核酸检测阴性。

讨论: 患者的特点是既有新冠病毒感染的症状, 同时兼有气虚证候。所以选人参败毒散加减, 以扶正祛邪。该方载于《太平惠民和剂局方》, 正如余霖所言, 乃“治瘟第一方”。本人常用此方治疗新冠病毒感染患者症见体倦乏力者。该例由于药证相符, 故见效甚速。体现了中医辨证论治的特点。

病例 2, xxx, 女, 32 岁, 舞蹈教师, 有与新冠病毒患者接触史, 但尚未去医院做核酸检测。其父母都是我的老病人和朋友, 于 1/4/2020 微信上远程就诊。自述 12 月中旬开始即有感冒症状, 咳嗽, 咽喉不适, 讲话多时加重, 近日又出现呼吸费力, 喉中有痰阻塞感, 平卧时呼吸困难加重, 体温 38 度, 有时怕冷, 短气, 乏力, 大便有时偏稀。舌质淡, 苔白腻。因未做核酸检测, 根据接触史和临床表现, 诊断为疑似新冠病毒感染。

处方: 射干麻黄汤加减, 用中药浓缩粉。

射干 1 克, 麻黄 0.5 克, 紫菀 1 克, 款冬花 1 克, 苍术 1 克, 厚朴 1 克, 半夏 1 克, 陈皮 1 克, 五味子 1 克, 陈皮 1 克等。上药均为粉剂, 为每日药量, 日服两次, 给予 2 周药量。

观察: 3 天后咳嗽和呼吸困难明显缓解, 10 天症状基本消失, 继续服药调养。

讨论: 病人有新冠感染接触史, 根据临床表现, 诊断为疑似新冠病毒感染。中医认为是疫邪外袭, 痰阻肺喉之证, 故用射干麻黄汤以宣肺化痰平喘为主, 同时用平胃散行气化湿。根据英国药管局规定, 麻黄用量每次不能超过 600 毫克, 这是因为麻黄含有麻黄碱, 有兴奋交感神经和大脑皮层的作用, 如果用量过大会引起心率加快、血压升高、烦躁不安, 甚至失眠等。所以这里麻黄的用量仅是 0.5 克, 旨在避免发生副作用。关于英国中药禁用中药的具体规定, 请阅读我 2012 年出版的“伤寒论研习指导”英文版。

病例 3: 女, 51 岁, 商人。于 28/3/2020 由朋友介绍在微信上就诊, 自述与新冠病毒感染者有间接接触史, 即其女儿的同事因感染新冠病毒已经住院治疗。近八天来发热, 体温 38.5, 打喷嚏, 流鼻涕并带少量鲜血, 大便稀, 全身酸痛, 膈部尤甚, 精神萎靡不振, 有恐惧感, 咳嗽, 胸骨疼痛。另外, 1 年前闭经, 有时面部烘热出汗。根据接触史和临床表现, 诊断为疑似新冠病毒感染综合症。

治疗用自拟“速效新冠清合剂”, 中药浓缩颗粒。

处方: 苏叶 0.5 克, 桔梗 1 克, 紫菀 1 克, 百部 1 克, 白前 0.5 克, 陈皮 0.5 克, 甘草 1 克, 竹叶 0.5 克, 石膏 0.5 克, 党参 1 克, 半夏 0.5 克, 麦冬 0.5 克, 栝楼皮 1 克, 薤白 1 克, 柴胡 0.5 克, 枳壳 1 克, 款冬花 0.5, 葛根 1 克。上药均为粉剂, 为每日药量, 日服两次, 给予 2 周药量。

观察: 15/4/2020 跟踪微信视频, 病人说吃药后的第一天鼻塞消失; 第二天发热消退, 第三天后肢体疼痛消失。第五天后其他症状基本都没有了。但仍感到疲劳、食欲不振、厌油腻食物, 心理上仍稍感有恐惧感。故以原方加百合 1 克, 生地黄 1 克, 继续调养 2 周。

讨论: 该方是自己治疗新冠及疑似症的验方, 实际上由止嗽散、栝楼薤白半夏汤、竹叶石膏汤以及败毒散综合化裁而成。后加的百合地黄汤, 对热性病或其他疾病引起的恐惧感和焦虑症有效。由于方中使用的药物药性平和, 没有麻黄、细辛之忧, 而且见效很快, 容易被病人接受, 大家不妨一试。

备注: 目前英国医院仍然只检测和收治重症患者和高危人群, 有疑似症状或者已确诊的轻症患者仅建议在家隔离, 无特殊治疗。所以有很多同胞和一些相信中医药的西人前来寻求中医药的帮助。另外, 上述任何药方需在有资质的中医师的建议和指导下服用, 不得擅自服用。

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宣肺败毒方

来源于麻杏石甘汤、麻杏薤甘汤等经典名方。主要成分由生麻黄、苦杏仁、生石膏、生薤苡仁、茅苍术、广藿香、青蒿草、虎杖、马鞭草、干茅根、葶苈子、化橘红、生甘草 13 味中药组成。功效为宣肺化湿、清热透邪、泄肺解毒。主要适用于新冠肺炎轻型、普通型患者的治疗。能缩短临床症状消失时间、体温复常时间、平均住院天数等, 能在一定程度上阻断轻型、普通型转重型。

英国中医药学会

**The Association of Traditional Chinese
Medicine and Acupuncture UK**

地址 Address:

ATCM,
Suite 1, The Brentano Suite
Solar House,
915 High Road
North Finchley
London N12 8QJ

电话/传真 Tel/Fax: 0044 (0)20 8457 2560

微信 WeChat: ATCM-OFFICE

电子邮件 Email: info@atcm.co.uk

网站 Website: www.atcm.co.uk

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