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Fu Qing Zhu's Treatise on Gynaecology

Shulan Tang (Manchester)

Keywords: Nuke, Regulating menstruation, Special characteristics of the formulae

'Nu Ke' was written by Fu Shan in the late Ming and early Qing dynasty. He lived between 1607 and 1684 AD and has other names such as Qing Zhu and Gong Ta. This article focuses on the chapter of Regulating Menstruation, and contains analysis and research on the fourteen disease patterns and fifteen formulas therein and offers theory and guidance to the practitioner. 'Nu Ke' is a creative TCM gynaecological book, differentiations are precise and prescriptions are simple, but effective.

Mr. Fu treats menstrual disorders mainly based on nourishing the Kidneys whilst concurrently treating the Liver and Spleen and as a result, the academic created his own style of treatment.

1. Nourishing the Kidney to Benefit Essence

Fu Qing Zhu is a highly respected Nei Jing theory and recognised that in women's physiology the kidneys played a significant role, and also that the kidneys and menstruation are intimately related. He said "the menstruation's origin is not the blood, but is the water from heaven and comes out from the kidney". It is clear from this that menstruation impacts on the Yin and essence in the kidneys. Menstruation "is the essence of the extreme Yin and also contains the Qi of the extreme Yang". This explicitly states that the substance which is the foundation of menstruation is kidney yin, however for this to come about, it must be financed and aided by kidney yang. The function of menstruation relies heavily on the motive force of kidney yang. If the kidneys are deficient, then kidney yin and kidney yang lose harmony and this is the main reason for the development of menstrual disease. Fu Qing Zhu treatments primarily tonify kidney yin and kidney yang.

1.1 Tonifying the Kidney to Treat the Root, the Key is to Nourishing the Water

Fu Qing Zhu continues the theory and agrees with the opinion of the Zhao Xian Ke who considered that "to enrich or nourish water was of primary importance when regulating menstruation". He recognised that in women the root of menstruation was kidney water and when regulating menstruation, used the treatment method of enriching and tonifying kidney water to cultivate the root or foundation.

For example, in regards to early menstruation syndrome, Fu Qing Zhu concentrated on the quantity of menstrual blood and its relationship with kidney water, the pattern discriminations were subtle but clear. He regarded the differentiation between deficiency and excess as essential, "When the period comes to early the flow is profuse" and "Early in the menstrual period, there is spotting". About the former disease mechanism, he said "Kidney water is too prosperous", this belongs to the category of excess. Concerning the latter disease

pathology he said "Fire is flourishing in the kidney and Yin and water are depleted", this belongs to the category of deficiency. For excess patterns, the principle is to clear fire, for deficiency patterns it is essential to nourish water. Pattern discrimination would establish the use of either Qing Jing San or Liang Di Tang, two formulas successfully used to treat extreme fire and blood heat during menstruation. The original cause of the conditions and therefore the treatment methods are different, one treats a surplus of water and the other treats an insufficiency of water.

Qing Jing San principally treats fire flourishing in water leading to early menstruation with copious or profuse bleeding. Regarding this, Fu Qing Zhu said "If fire is unchecked and allowed free reign and there is a surplus, then new water cannot be manufactured and there is insufficiency, the treatment method is to lightly or gently clear the heat, the fire must not be drained". This formula contains Mu Dan Pi and Di Gu Pi which primarily clear fire and gently assist Sheng Di Huang, and Shao Yao as assistant herbs, to enrich yin and nourish blood. If hyperactive fire is cleared, then blood heat is calmed, water is not drained and menstruation corrects itself. Therefore it is said "Although the substances in this formula clear fire, the ingredients also enrich water, fire is drained without discharging water. It has the purging function but has a tonifying result".

Liang Di Tang primarily treats kidney fire flourishing and yin water depletion leading to early menstruation in the early phase of the menstrual period. Fu Qing Zhu said "This treatment method must not drain fire but instead focus on tonifying water, if water is sufficient then fire will be dispersed". Hence this formula contains Sheng Di, Xuan Shen, Bai Shao and Mai Dong, medicinals which enrich yin and nourish blood, attaining "when water flourishes, then fire is controls itself", yin and blood are generated and menstruation self regulates. The various herbs used in this formula simply tonify water.

From analysing these two formulas above, it can be seen that Fu Qing Zhu's method of regulating menstruation attached importance to protecting kidney water, and even when kidney water and fire are both flourishing, not only did he not drain kidney water, he also cleared kidney fire at the same time, and by adding a small quantity of medicinals to enrich and tonify kidney water, in order to cultivate the root of menstrual blood.

1.2 To Strengthen Kidney Yang, The Main Principle is to Warm and Moisten

While the main focus when regulating menstruation is to enrich water, yin cannot exist without yang. Fu Qing Zhu attached importance to the tonifying of kidney yang. He recognised that "fire depletion can be assisted by a small number of herbs within a formula, if too many hot medicinals are used, their effect is too drying, unlike that of warm sweet medicinals", and therefore in his formulas to regulate menstruation, he often liked to use warm

moistening medicinals to replenish essence, Ba Ji, Tu Si Zi, Rou Cong Rong, Xu Duan, Du Zhong etc. He placed particular emphasis on Ba Ji and Tu Si Zi. In the chapter on regulating menstruation there are fifteen formulas, and nine of these use warm medicinals to tonify kidney yang. Ba Ji is used in four of these formulas. Tu Si Zi is used in two formulas. They are used in large amounts, as in Ding Jing Tang and the dosage can reach one liang (30gms).

In modern times, experiments have proven that Ba Ji or Tu Si Zi do not directly stimulate hormonal secretions, but stimulate hormonal activity and can regulate (raise or lower) ovarian activity through the cerebral ganglion pituitrin, thereby enabling improvement in ovarian function. This is one aspect of regulating menstrual cycle and of maintaining that regulation which has great significance.

2. Soothing, Softening and Regulating the Liver

Fu Qing Zhu decreed "in women, the root is blood" and "Chong Mai is the sea of blood". These statements show that he recognised that Chong Mai is responsible for menstruation. The Liver is the Zang organ which stores blood and which is also linked to Chong Mai. For this reason if Chong Mai is deficient, not only does this involve pre heaven kidney or post heaven spleen and stomach transformation and generation, but even more is dependent on the livers functions of storing blood and dispersing. Nu Ke - The chapter on regulating menstruation discusses the treatment aspects of soothing and softening the liver, and this theory has specific characteristics.

2.1 Softening the Liver and Resolving Stagnation and The Effectiveness of Using a Smaller Dosage Amount

The Liver stores blood, governs dispersal, likes smoothing and has an aversion to restraint and stagnation. Its substance is blood and its function is qi and in women the liver can cause particular problems with qi and blood. If the liver is softened and stagnation is resolved, then the liver qi is in order, dispersal is expedient, blood moves freely and smoothly, qi and blood are fully integrated and menstruation is uneventful, but if it is unregulated or irregular, this can be treated easily. In Nu Ke - this method of softening or soothing the liver is extensively used, the characteristics of the medicinals is simple and in each formula there is normally one medicinal to soothe the liver and in many, there are two medicinals, formulas including three of these medicinals are not so common. These medicinals are used in smaller amounts, between 5 fen (1.5gms) and 1 qian (3gms), and the intention is to use their qi and light quality, in the hope that it will rise and ascend. All this embodies the characteristics of Fu Qing Zhu's method of soothing the liver using smaller dosage. For example, if menstruation is irregular with no fixed pattern, Fu Qing Zhu points out that it would not be incorrect to think of qi and blood deficiency which in turn, leads to liver qi stagnation. "Menstrual water/blood comes forth from the kidney, the liver is the son of the kidney. If there is liver stagnation, then there is kidney stagnation: if there is kidney stagnation, then qi cannot disperse, the menstrual period will be irregular (come

early or late), possibly be short in duration or be continuous. This means the kidney is sometime free and sometimes obstructed". The Liver is in charge of the sea of blood and governs dispersing and the release of stagnation, the kidney governs the uterus and stores essence. The liver and kidney are an integral whole so essence and blood have the same source and therefore if the kidneys are deficient, then the liver wood loses nourishment and this can lead to liver qi stagnation. Conversely if there is liver stagnation, this can damage the kidney. The son and mother have this mutual interaction. The view concerning liver stagnation can affect the kidney is that if there is liver qi stagnation then the liver loses charge of dispersal and the sea of blood loses regulation. If there is kidney qi stagnation, then essence and blood are not transformed and the uterus loses nourishment. Therefore, when menstruation occurs it can be of short duration or continuous and can be irregular, arriving earlier or later than expected. In relation to this disease mechanism, Fu Qing Zhu points out "The correct treatment method is to disperse liver stagnation and to open kidney stagnation. When liver and kidney stagnation are dispersed and opened, then menstruation will settle itself into a regular pattern." It has been established that Ding Jing Tang disperses the liver and opens the kidneys. This formula contains, as its principal herbs, Tu Si Zi, Shu Di Huang, Dang Gui, and Bai Shao to enrich the kidney and nourish the liver. Fu Qing Zhu states "If there is a desire to connect, first there must be sufficiency". The formulas' function is to tonify and benefit the liver, kidneys, essence and blood. When combined with Chai Hu to disperse the liver and resolve stagnation, the objective of both dispersing and tonifying is attained. Chai Hu is dosed at only five fen (1.5gms), and is used for its clearing, light and ascending action, and also for its diffusing, penetrating and dispersing nature. As a result, the objective of both dispersing and tonifying and opening stagnation without harming the Upright (Qi) is achieved. This was later said about Fu Qing Zhu's formulae "The treatment of untreatment is just the magic treatment". If Chai Hu was not used in this formula to disperse, rectify and smooth the reaching, then while the liver, kidney, essence and blood would be sufficient and flourishing, stagnation would not be released and menstruation would still be restrained and not arriving at the designated time. From this it can be seen that Fu Qing Zhu's use of medicinals was ingenious and that the inclusion of the light quality was particularly effective.

2.2 To Nourish Blood and Soften the Liver, Dang Gui and Bai Shao are the essential medicinals

Nu Ke - In the chapter on Regulating Menstruation there are fifteen formulas, Bai Shao is used in twelve of these and Dang Gui is used in nine. Bai Shao and Dang Gui are used together in eight formulas. From this it is obvious that Fu Qing Zhu considers Bai Shao and Dang Gui to be essential medicinals to resolve liver stagnation, to nourish the body of the liver, to soften the liver and to satisfy its liking of order and dispersal.

For example, in the case of lower abdominal pain after menstruation, Fu Qing Zhu plainly knew this to be kidney water insufficiency. After menstruation if kidney

water is insufficient, water cannot contain wood, liver qi rebels and takes advantage of spleen earth. Wood and earth struggle with each other, and this leads to rebellious qi and pain. Although lower abdominal pain after menstruation presents as an excess condition, it is caused by or rooted in kidney deficiency. Liver wood has lost nourishment, the liver qi then stagnates leading to the lower abdominal pain. The root of this condition is depletion and deficiency of kidney water, although the outward signs are those of liver qi stagnation. Fu Qing Zhu put forward his treatment method "Primarily, be sure to relax liver qi, then use medicinals to benefit and tonify the kidney", as found in Tiao Jing Tang, which benefits the kidney and relaxes the liver. This formula which uses Shan Yao, E Jiao, Shan Zhu Yu, Ba Ji Tian to enrich and tonify the kidneys and essence, transform blood, moisten and nourish the liver, also cleverly uses Dang Gui and Bai Shao to directly enter the liver channel in order to nourish blood and soften the liver, - this guides the nourishment directly to the liver blood and the qi then automatically relaxes. Therefore with lower abdominal pain after menstruation, in the treatment plan it is important to also facilitate the dispersal of liver qi and then the condition is naturally eliminated.

In addition, Fu Qing Zhu also used this method of dispersing stagnation in Tong Jing Tang, Shun Jing Tang and Jia Wei Si Wu Tang where he again used Dang Gui and Bai Shao in combination to nourish blood and soften the liver, thereby achieving the aim of relaxing the liver and regulating menstruation. From the regular pattern seen in this group of Fu Qing Zhu's formulae, it can be seen that Dang Gui and Bai Shao combined are medicinals which must be used to nourish blood and soften the liver. Dang Gui is pungent, bitter, sweet and warm and fragrant. It enters the liver, spleen and heart channels, its Qi enters the blood system and it has the functions of nourishing and harmonising blood. Zhang Jing Yue said "Dang Gui, its flavour is sweet and heavy, therefore it focuses on tonifying blood. Its qi is light and pungent, therefore it can move blood, it resides the moving in the tonifying and resides the tonifying in the moving, it is actually a qi herb of the blood, and is also an eminent herb to enter the blood". For blood, qi and liver stagnation patterns only Dang Gui very effectively nourishes and also protects the liver, it can manage the nature of the liver, and regulate both qi and blood. Bai Shao Yao is sour, bitter and slightly cold and also enters the liver and spleen channels. Its flavour is sour to nourish blood and soften the liver. The Nei Jing says "The liver desires the sour flavour", the Jin Gui notes "If the liver is diseased, tonify using the sour flavour". Cheng Wu Ji said " Bai Shao is sour, it astringes and benefits the jin ye fluids, and also nourishes the complexion". Its slightly cold nature firstly can clear blood deficiency with liver stagnation which has transformed into heat. Furthermore it can control Dang Gui's pungent, warm and aromatic nature and guard against harm from blood deficiency and internal heat when obstructive heat is harming the movement of blood. When Dang Gui and Bai Shao are combined, they reside the regulating in the tonifying, they not only give consideration to the liver's body but also give consideration to the function of the liver whilst being

neither too hot nor too cold, and can be considered to be the best medicinals in combination to nourish blood and soften the liver.

3. Warm Earth to Strengthen the Spleen

The spleen zang organ governs transportation and transformation, commands the blood and has a secondary function to normalise or negate the principal causes of pathological physiology in females. Fu Qing Zhu's emphasis is between regulating through tonifying qi and warming yang with strengthening the spleen and assisting transportation. The one which impels and commands the movement of blood and the other whose essential nature is to transform and transport water dampness. This is another one of the distinguishing features in Fu Qing Zhu's method of regulating menstruation.

3.1 Through the kidney treat the spleen, in this way fire warms earth

The spleen requires strong and unflinching transportation, and it relies on kidney yang and ming men fire for warmth. Fu Qing Zhu said "to tonify the spleen, it is appropriate to tonify the fire in the kidney, to stoke kidney fire generates spleen earth. If the spleen is deficient and cold, the kidney is responsible, they cannot be differentiated". Consequently in cases of spleen deficiency and weakness, transformation and transportation will be abnormal leading to irregular menstrual patterns. Fu Qing Zhu used this treatment method of tonifying kidney yang to warm spleen earth and his formulas used to do this are also seen as a distinguishing feature of this chapter.

For example, Fu Qing Zhu stated "before the period, drain water" and he further expounded on this theory, "The spleen is associated with dampness and earth, if the spleen is deficient, then earth is not in excess, if earth is not in excess then dampness prevails", and also "when menstruation is about to start and the spleen is not secure, - the spleen controls blood and wants to pour into the sea of blood but is overwhelmed by damp qi," therefore "first drain water and following this there is menstruation". This clearly states that if the spleen is deficient and weak, transformation and transportation become abnormal, the sea of blood is attacked by dampness and is the main cause of the the drain of water before the period. This is an important symptom of this pattern. The kidney governs storage, if kidney yang is deficient then storage is not maintained: moreover the kidney is the residence of water and fire, fire is stored in the water, if true fire is insufficient, then it cannot travel up to warm spleen yang, nor can it travel down to receive essence or control water, according to this pathology and this can also lead to the pattern of the drain of water before the period. Although, Fu Qing Zhu only said "tonify spleen qi to secure spleen blood, then blood is controlled by qi" and from this principle, his formula Jian Gu Tang came into being which truly embodies the method of warming the kidney to warm the spleen. In the formula Ren Shen, Fu Ling, Bai Zhu and Yi Yi Ren tonify qi and strengthen the spleen and at the same time disinhibit water and eliminate dampness, assistant is Ba Ji which is used at a dosage of five qian (1 qian = 3gms, 5 qian = 15gms) and warms the

kidney to heat earth, tonifies pre-heaven and secures post heaven. In this way spleen qi gradually begins to flourish and it can then transform and transport water dampness. If damp evils are melted, then "the drain of water before the period stops". From this it can be seen that Fu Qing Zhu's method of warming the kidney to warm the spleen is the correct way to accomplish the treatment of this condition.

3.2 To Correctly Tonify and Strengthen the Spleen, The Pathways Must be Dredged

Fu Qing Zhu once said "Normally, illness leads to qi and blood depletion, spleen and stomach deficiency." This emphasises the importance of regulating and harmonising the spleen and stomach so that Gu qi can flourish, the sea of blood can be clear and calm and menstruation does not lose its rhythm. Because of this Fu Qing Zhu placed special emphasis on tonifying qi and strengthening the spleen. Nu Ke - In the chapter on Regulating Menstruation there are 15 formulas, and in four of these a herb to tonify qi is the emperor, for example Zhu Xian Dan, An Lao Tang, Jian Gu Tang and Wen Qi Hua Shi Tang. All of these contain herbs which tonify qi as the emperor, e.g. Ren Shen, Huang Qi, Bai Zhu, Fu Ling, and moreover the dosage can vary from 5 qian (15gms) to 1 liang (approx 30gms). Although these are qi tonifying herbs, they are selected differently in these formulas and are used according to their other functions.

For example Zhu Xian Dan is used to treat the Menstruation Many Months One Move, with qi and blood deficiency where the condition is relatively mild. Therefore Fu Qing Zhu only used Bai Zhu, Fu Ling, Gan Cao and Shan Yao to regulate and rectify the stomach and spleen and to support the generation of menstrual blood at the source, combined with Tu Si Zi, Du Zhong, and Bai Shao which benefit the kidney and nourish the liver. Over all, these are substances to which harmonise and provide balanced supplementation in a gentle manner. Concerning An Lao Tang which assists the movement and restoration of the menstrual cycle, Fu Qing Zhu said "the liver is not storing and the spleen is not commanded" and this pattern manifests with signs such as "in women who are above the age of fifty, who suddenly menstruate, possibly with purple blood clots, or have red blood strangury because of blood collapse, with there being all degrees of

flooding". The treatment method is to strongly tonify liver and spleen qi and blood because this will stop the bleeding quickly. This formula uses Ren Shen, Huang Qi, Bai Zhu and Gan Cao as principals to tonify qi and strengthen the spleen, to enable the spleen qi to return to sufficiency and to get the right of command back to the blood. Assisting are Shu Di, Dang Gui, Shan Yu Rou and E Jiao which tonify and benefit the essence and blood of the kidney - in this way fire and water are balanced. It is also excellent to use a small dose of Xiang Fu to rectify qi and harmonise blood, Hei Jie Sui and Mu Er Tan which cool and stop bleeding. And so liver and kidney are tonified, spleen qi is strengthened, depressive fire is cleared, and there is no incessant bleeding. In cases like this when tonifying herbs are used but the formula is not strong enough then it will be difficult to be successful.

In accordance with the degree of seriousness of the patient's condition, Fu Qing Zhu would use herbs to tonify qi. Whilst the moving resides in the tonifying, this shows the superior craftsmanship of Fu Qing Zhu. While tonifying qi and strengthening the spleen, he would often simultaneously use small amounts of herbs which disperse qi and open the pathways, ensuring tonification without greasiness, and the strengthening of spleen transportation. For example as in Zhu Xian Dan above which supplements the foundation of spleen qi in a balanced way and only uses the pungent, bitter, warm and aromatic nature of Chen Pi to rectify qi and transform phlegm. Of this formula Fu Qing Zhu said "it strengthens the spleen and benefits the kidney without causing stagnation, resolves depression and clears phlegm without draining". An Lao Tang simultaneously and strongly tonifies the liver, spleen and kidney with just one ingredient, Xiang Fu, pungent, slightly bitter and sweet, connects to and moves the qi of the three jiao, disperses the liver and resolves stagnation, whilst the aromatic nature arouses the spleen qi and also enters the blood to move qi - this tonifies without obstructing, enriches without being greasy and although only used at the dosage of 5 fen (1.5gms), enables the formula to reside the active in the settled and reside the moving in the tonifying, making it all the better to develop the tonifying function. These are the special characteristics in this group of Fu Qing Zhus' formula.

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Syndrome Differentiation of Lung Patterns

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Abstract: This article reviews the functions of Lung in terms of TCM Zang Fu theory, emphasising the importance of its D&D (dispensing and descending function), with the focus on the common Lung syndrome patterns. The author highlights the core role of Lung dysfunction of D&D in its all clinical patterns, not matter deficient or excessive. A diagram is created to elustrate the etiology, pathogenesis and clinical nature of Lung syndrome pattern.

In TCM, we use the singular noun “Lung” with the capital letter “L” in order to distinguish the TCM Lung with two anatomic lungs in western medicine. In Zang Fu theory of TCM, Lung is situated in the thorax. It occupies the uppermost position among the zang-fu and is known as the “canopy” of the zang-fu organs. Its meridian connects with the large intestine with which it is closed related.

1. The functions of Lung

1.1 Dominating Qi and respiration

Dominating Qi has two aspects: (1). dominating the Qi of respiration, and (2). dominating the Qi of the whole body.

(1) Lung is a respiratory organ through which the Qi from exterior and the Qi from interior are able to mingle. Via Lung, the human body inhales the clean Qi from the natural atmosphere and exhales turbid Qi from the interior of the body.

(2) The function of Lung in respiration greatly influences the physiological activities of the whole body. The clean Qi is one of the sources for the production of Qi and blood. Once inhaled by Lung, clean Qi is combined with essence from food to form Pectoral Qi. Pectoral Qi accumulates in the chest, ascends to the throat to dominate respiration, and it distributed to the whole body in order to maintain the normal functions of tissues and organs.

When the function of Lung is normal, the passage of Qi will be unobstructed and respiration will be normal and smooth. Deficiency of Lung Qi may lead to general lassitude, feeble speech, weak respiration and shortness of breath.

1.2 Dispensing and Descending Qi and Body Fluids

1) Dispensing here means distributing outwards. It is by the dispensing function of Lung that defensive Qi and body fluid are distributed to the surface of whole body to warm and moisten the skin and body hair. The skin and body hair, including sweat glands, serve as a protective screen to defend the body from exogenous pathogenic factors. And this defending function is mainly performed by Lung as it disperses defensive Qi to the body surface. In this sense, it is said that “Lung dominates the body surface.”

The close physiological relationship between Lung and skin/hair means that they often affect each other pathologically. For example, exogenous pathogenic factors often invade Lung through the skin and hair, give rise to symptoms such as chilly sensation, fever, nasal

obstruction and cough, reflecting dysfunction of Lung in dispersing. On the other hand, if Lung Qi is deficient, it can result in the skin becoming wan and sallow and weakness of defensive Qi, and hence lead to susceptibility to catching cold. Furthermore, when Lung Qi fails to protect the surface of the body, there may be frequent spontaneous perspiration.

2) Descending: While Lung disperses Qi, nutrition and body fluids to the skin and hair, Lung also descends Qi and collects the waste and body fluids from the skin, hairs and other surface part of the body and then sends them down to lower-Jiao, the Kidney to excrete them.

Since Lung is the uppermost zang organ, its Qi descends to promote the circulation of Qi and body fluid through the body and to conduct them downwards. Dysfunction of Lung may lead to upward perversion of Lung Qi with symptoms such as cough and shortness of breath.

1.3 Regulating the water passages

Regulating the water passage means to regulate the pathways for the circulation/distribution and excretion of water (body fluids). The role of Lung in promoting and maintaining water metabolism depends on the descending function of Lung Qi. Dysfunction may result in dysuria, oliguria and oedema.

1.4 Opening into the nose

The nose is the pathway for respiration. The respiratory and olfactory functions of the nose depend on Lung Qi. When Lung Qi is normal, the respiration will be free and the sense of smell acute. Dysfunction of Lung in dispersing, for example, due to invasion of wind-cold, will lead to nasal obstruction, runny nose, and anosmia. Excessive pathogenic heat in Lung will lead to shortness of breath and vibration of ala nasi.

2. D&D: Core Patho-physiology of Lung

The dispensing and descending (D&D) function plays the most important role in the physiological activities of Lung. Respiration is the combination of Qi dispersing and descending, dominating body surface is mainly through dispersing both Qi and body fluids, while regulating water passage mainly relies on descending function. Therefore, in Lung pathogenesis, dysfunction of D&D is the core to most Lung syndrome patterns. Generally speaking, acute or early stage of Lung syndromes mainly involves dispersing dysfunction, which manifests as superficial syndrome with respiratory and/or body fluid symptoms. In later or chronic stage it

mostly affects the descending function leading to interior syndrome with prolonged respiratory or body fluids symptoms.

3. Common Lung Syndrome Patterns

Lung syndrome patterns can be deficiency or excess. Deficiency patterns are commonly Lung Qi or Lung Yin deficiency, Excess patterns are either wind/cold/heat or dryness invasion into Lung, or phlegm retention in lung. The main pathogenesis is Lung Qi failing to disperse and descend, leading to Lung Qi malfunction in respiration, failing to dominate the superficial, failing to distribute body fluids, or Lung Qi uprising. Manifestations of Lung system diseases are mainly cough, phlegm, shortness of breathing, chest pain, haemoptysis, etc.

3.1 Wind Cold Invading Lung

Wind with cold invades Lung from exterior, causing Lung Qi failing to disperse to the body superficial.

Symptoms: Cough with thin white phlegm, running nose with thin watery discharge, aversion to cold, slight fever, no sweating, pink tongue with white coating, floating and tight pulse.

3.2 Wind Heat invading Lung

Wind with heat invades Lung from exterior, affecting Lung function in superficial dispersing.

Symptoms: cough with thick yellow phlegm, nasal obstruction with thick yellow discharge, fever, slight aversion to cold, dry month, sore throat, red tongue tip, thin yellow tongue coating, floating and rapid pulse.

3.3 Dryness Invading Lung

Seasonal dryness pathogen invades Lung, impairing body fluids in Lung, and affecting Lung function in dispersing superficial.

Symptoms: Dry cough with no phlegm, or little sticky phlegm, difficult to cough out, dryness in mouth, nose and throat, probably slight fever with chill, red tongue with white or yellow coating, rapid pulse.

3.4 Phlegm Retention in Lung

Phlegm retention in Lung, obstruct the function of Lung Qi in dispersing and descending. It is usually caused by Spleen Qi deficiency resulting in damp retention which is transformed into phlegm and stored in Lung, or long-term cough/asthma damaging Lung Qi's function of dispersing and descending body fluids, the later accumulates in Lung itself.

Symptoms: cough with profuse phlegm, foamy and white, easy to cough out, chest tightness, or even short of breath or asthma with wheezing, pale tongue with white thick coating, slippery pulse. Depending on what other pathogenic factors is combined with phlegm, the syndrome of phlegm retention in Lung can be divided into damp phlegm, cold phlegm, heat phlegm and dryness phlegm patterns.

3.5 Lung Heat (Heat in Lung)

Exterior heat enters interior (Lung), or exterior cold enters interior (Lung) and converts into heat, or interior heat from other zang organs (mostly from liver heat) transmits into Lung, affecting Lung function of dispersing and descending.

Symptoms: Fever or feeling hot, sweating, thirst, dry month; loud heavy cough with yellow thick phlegm, short of breath or asthma with wheezing, probably chest pain and/or haemoptysis, Red tongue with yellow coating, big rapid pulse.

3.6 Lung Qi Deficiency

Lung Qi is weak and fails to disperse and descend Qi throughout the body and defend the exterior. It is usually caused by congenital weakness, long-term lung illnesses (cough/asthma), or lack of Qi production.

Symptoms: Cough with short of breath, weakness in cough and breathing, worse after exertion, fatigue, not willing to talk, low speech/cough voice, thin and white phlegm, pale complexion; or spontaneous perspiration, prone to catching cold/flu, pale tongue with white coating, weak pulse.

3.7 Lung Yin Deficiency

Lung Yin is insufficient, Yin Xu leading to deficient heat generated from interior. It is usually caused by long-term lung disease (cough/asthma, etc.) damaging Lung Yin, or Lung Yin and body fluids impairment in late stage of febrile diseases.

Symptoms: Dry cough with no phlegm, or little thick/sticky phlegm, or even blood in phlegm; dry month and throat, tidal fever in the afternoon, "five palm heat", night sweating, hoarse voice, red tongue with little coating, thin and rapid pulse.

4. Comparison between Lung Heat Syndrome and Phlegm Heat in Lung Syndrome

These two common syndromes of Lung are very much similar and often considered by many TCM experts as the same. They both are excess heat syndromes and involve dysfunction of Lung, mostly causing respiratory symptoms such as cough, short of breath, fullness or tightness or even pain in the chest, etc.

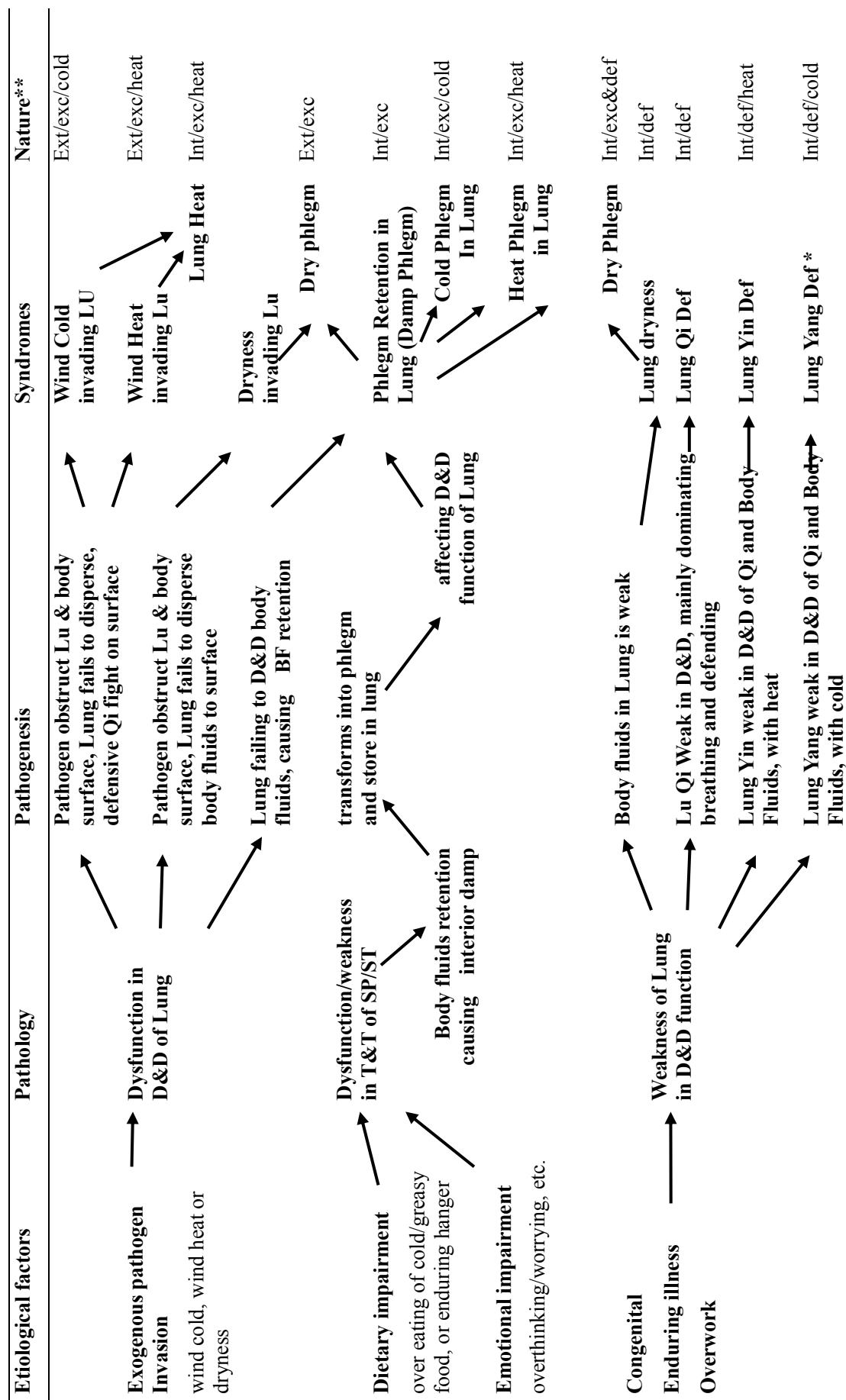
Phlegm heat in Lung syndrome can be seen as the combination of Lung heat with phlegm retention. Phlegm retention is due to Lung heat causing dysfunction of D&D which fails to circulate and distribute body fluids and then body fluids accumulate in Lung itself; or phlegm can come from other sources such as transformed from damp in middle Jiao due to Spleen dysfunction in the first place, while lung heat coexists.

Lung heat syndrome can often cause phlegm retention in Lung itself and if phlegm is apparent, it is also called phlegm heat (or heat phlegm) in Lung syndrome. If Lung heat does not cause phlegm retention or phlegm is not apparent, then it is simply called Lung heat syndrome.

Lung heat syndrome affecting the D&D of body fluids can be in a different route. Heat can impair or consume body fluids leading to body fluid deficiency in Lung causing dryness syndrome, or Upper Xiao syndrome in Xiao Ke (diabetes). In this case, It is only Lung heat syndrome with no phlegm retention.

4. Lung Syndrome Diagram (See next page.)

Etiology/Pathogenesis Diagram: Lung Syndromes



*. Lung Yang deficiency merely exists on its own, but usually is mixed syndromes with Heart or Kidney Yang deficiency

**.. based on eight principles: ext-exterior; int-interior; exc-excess; def-deficiency.

Review on Current Management of Insomnia with focus on Acupuncture Treatment

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The difficulty in falling asleep, maintaining sleep, experiencing interrupted or non-restorative sleep, and/or early morning awakenings, are commonly classified as insomnia (Sateia and Nowell, 2004, 1960). According to the National Institute of Health (NIH), insomnia is defined as a complaint of disturbed sleep in the presence of adequate opportunity and circumstance for sleep. The difficulty in sleep usually results in disruption of daytime functions and well-being, featured by lack of concentration and energy. Insomnia may occur secondarily (co-morbid insomnia) to other disorders, such as depression, cardiovascular, pulmonary and/or gastrointestinal diseases. However, in the absence of other diseases, insomnia is classed as a primary disorder (Kraus and Rabin, 2012, 193-194; NIH, 2005). Primary insomnia has no known pathology. Evidence implies a state of 'hyper-arousal' as a causative factor, in which insomnia results from disturbance in the inhibition and excitation of the cerebral cortex (Sok et al, 2003, 382; Taylor et al, 2006, 1373). Possible risk factors associated with insomnia include gender, with women at higher risk than men; taking multiple medications, history of alcohol/substance abuse, old age, shift work, psychiatric illnesses and/or chronic illnesses (Bastion et al, 1996, 183; Buscemi et al, 2005, 5).

Insomnia has various meanings dependent upon the circumstances of discussion, ranging from a complaint (in relation to sleep quantity or quality) of a patient, a symptom (part of a sleep disorder or of a mental or organic disorder), or a sleep disorder (primary or secondary) in medical statements. The diagnosis of primary insomnia requires medical investigations excluding various factors and possible causes (Ohayon and Reynolds, 2009, 952). Primary insomnia also requires differentiation from chronic (> 4 weeks) and acute insomnia (a few days and/or < 4 weeks), which may occur in anyone at any time, for example, the night before an important event (NIH, 2005, 9).

In a primary care setting, diagnosis of primary insomnia is primarily based on information gathered from the patient, family and/or caregiver, during the clinical consultation (Schutte-Rodin et al, 2008, 487). A detailed medical and psychiatric history is taken, including pain assessment and ruling out painful medical condition(s) that may be causing insomnia. Identification and assessment of medications the patient is taking, or any substance abuse, would also require exclusion as

probable causes of insomnia (Ramakrishnan and Scheid, 2007, 518). After thorough assessment of the patient's medical and psychiatric history, a sleep history (including duration of insomnia symptoms) would be obtained. A self-administered sleep questionnaire may be given to the patient, designed to gather information specific to the insomnia complaints. This includes pre-sleep patterns/conditions, sleep-wake patterns, sleep-related symptom and associated daytime consequences. An at home 'sleep-log' may also be given for the patient to take home and monitor their sleep patterns over a two week period. Sleep questionnaires and logs aid the practitioner in forming a baseline assessment of the sleep problem (Ancoli-Israel, 2004, 40; Holcomb, 2006, 57; Leopando et al, 2003, 45; Schutte-Rodin et al, 2008, 487; Thase, 2005, 105).

Several organisations proposed insomnia diagnostic criteria, each with different requirements (AASM, 2005; APA, 2000; WHO, 1991, ICD-10). All organisations agree that insomnia is a disorder of unsatisfactory sleep, either in terms of sleep onset, sleep maintenance or early wakening. They also acknowledge that insomnia impairs daily function and well-being (Wilson et al, 2010, 1578). Two organisations whose criteria are most commonly referenced and used in clinical research and general practice are the American Academy of Sleep Medicine's (AASM) International Classification of Sleep Disorder's Second Edition (ICSD-2), and the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorder's (DSM-IV-TR) (Kraus and Rabin, 2012, 193).

The AASM's International Classification of Sleep Disorder's ICSD-2 has been modified through the years many time (AASM, 1990) and became a more expansive and complex diagnostic system compared to the DSM-IV-TR criteria, narrowing down categories of insomnia into individual psychiatric and medical disorders (Appendix 1; ICSD-2 insomnia diagnostic criteria) (AASM, 2005; Buysse et al, 1994, 632; Buysse, 2008, 678; Drake et al, 2003, 164). As the ICSD-2 is comprehensive, insomnia is classed under the broad category of dyssomnias (extrinsic or intrinsic). Insomnia is further broken down based on severity of symptoms (mild, moderate or severe) (AASM, 2005; Saddichha, 2010, 97). In such, there are many categories and definitions of insomnia, as well as, several insomnia sub-types given. The thoroughness of ICSD-2 relies more

on combining patient consultation information with any laboratory tests performed. This results in a diagnostic process and criteria that is not as straight forward and easy for general practitioners to use in a primary care setting, and as such, is more commonly utilised by clinicians with specialised sleep training (Drake et al, 2003, 164; Edinger et al, 2011, 992; Ohayon and Reynolds, 2009, 956).

In contrast, the APA's DSM-IV-TR's (Appendix 2) requirement for an insomnia diagnosis does not rely on categorisation and sub-typing of insomnia. A DSM-IV-TR primary insomnia diagnosis is essentially more straightforward, relying predominantly on the clinic consultation and information supplied by the patient/caregiver (Edinger et al, 2011, 992). DSM-IV-TR's primary insomnia diagnosis entails that the patient has difficulty initiating sleep (DIS), difficulty maintaining sleep (DMS) or has non-restorative sleep (NRS), resulting in clinically significant distress or impairment in areas of daily functioning (health, familial, social and/or occupational). This loss of restorative sleep is not the result of, or occurring alongside another sleep disorder (circadian rhythm disorders, sleep apnoea, restless leg syndrome), mental disorder (anxiety, depression), or can be attributed to physiological side effects of a chemical substance(s) (alcohol, stimulants, antidepressants, corticosteroids, diuretics), and/or a general medical condition. For a DSM-IV-TR primary insomnia diagnosis, the sleep disturbances must have occurred for at least one month (APA, 2000; Morin and Benca, 2012, 1131). Essentially, the DSM-IV-TR requires that a primary insomnia diagnosis is not attributed too, or significantly influenced by a psychiatric, medical, substance-induced and/or other sleep disorder (Passarella and Duong, 2008, 928).

A cross sectional study involving 25,579 subjects, in seven countries, evaluated the effectiveness of the DSM-IV and ICSD-2 diagnostic criteria (Ohayon and Reynolds, 2009, 952). The prevalence of insomnia was analysed in relation to complaints of sleep dissatisfaction, sleep symptoms (DIS, DMS, NRS and/or early morning awakenings (EMA)), as well as, the impact of daytime consequences. The study concluded that 37% of the subjects reported at least one sleep symptom of insomnia and 40% reported associated daytime consequences. However, many of the subjects did not meet either the DSM-IV or the ICSD-2 diagnostic criteria to fulfil an insomnia diagnosis. This has lead researchers questioning whether either system is capable of recognising and diagnosing insomnia in patients (Kraus and Rabin, 2012, 194; Ohayon and Reynolds, 2009, 952, 955).

In May 2013, the APA released its newest version, the DSM-V criteria (Appendix 3). The new guidelines differ from previous ones, in that the sleep disturbances must be present for at least three nights a week, and have occurred for at least three months prior, for a primary insomnia diagnosis. New additions also include requirements for evidence of daytime impairment, as well as, the addition of early morning awakenings, resulting in inability to fall back asleep (APA, 2013; Wilkinson and Shapiro, 2012: 562). This should prove advantageous for current primary insomnia diagnostic criteria, as the new guidelines of the DSM-V model the ICSD-2 criteria. A 'harmonisation'

across both systems may afford greater consistency, aiding practitioners when formulating and making a primary insomnia diagnosis, as well as, establishing credibility within diagnostic criteria (Taylor et al, 2013, 340).

Western medical treatment for primary insomnia patients may involve both pharmacological and non-pharmacological therapies (Taylor et al, 2006, 1373). Treatment principles are aimed at improving sleep quantity and quality, as well as, improving daytime functioning in the patients (Ramakrishnan and Scheid, 2007, 518). Pharmacological therapies include non-prescription medications, including over the counter antihistamines containing diphenhydramine or doxylamine (initiate drowsiness), 'natural' treatments, such as valerian and/or melatonin, as well as, several classes of prescription medicine (Holcomb, 2006, 58; Kaplan, 2007, 6; Kraus and Rabin, 2012, 202). Amongst commonly prescribed medications are hypnotics; benzodiazepines and non-benzodiazepines (eszopiclone, zopiclone, zaleplon, zolpidem). Other prescription medications include antipsychotics (gabapentin, quetiapine, olanzapine), melatonin-receptor agonists (ramelteon), antidepressants; tricyclic antidepressants (amitriptyline, trimipramine, doxepine) and/or atypical antidepressants (trazadone, nefazodone, mirtazapine) (Berger and Gastpar, 1996, 235; Hajak et al, 2001, 454; Holcomb, 2006, 59; NIH, 2005, 15-16; Passarella and Duong, 2008, 927; Ramakrishnan and Scheid, 2007, 518, 523; Walsh et al, 1999: 371).

Within prescription pharmaceuticals, the most commonly prescribed drugs for treatment of insomnia are benzodiazepines. A meta-analysis, inclusive of 45 randomised controlled trials (RCT's), provides minimal evidence of benzodiazepines efficacy when treating insomnia. Benzodiazepines, when compared to placebo, decreased sleep latency by 4.2 minutes, as well as, increasing total sleep duration by 61.8 minutes. However, in the benzodiazepine groups, adverse side effects were reported, including daytime drowsiness, dizziness and light headedness. Also reported in several trials was a decline in cognitive function in patients prescribed benzodiazepines. The authors concluded that the small improvement in sleep symptoms were outnumbered by the associated adverse side effects, and that benzodiazepines did not provide a major advantage over placebo on outcome measures. Another limitation included the data from all trials being based on periods of two week or less, leading to the hypothesis that benzodiazepines do not afford long term relief for primary insomnia (Holbrook et al, 2000, 225, 228, 230).

Pharmaceuticals have demonstrated short term efficacy, primarily for reducing sleep latency and onset time in primary insomnia patients. However, they are also commonly associated with drug dependency and withdrawal symptoms. As such, the majority of pharmaceutical drugs currently prescribed are regulated and limited to a use of 35 days or less. This has led to treatment guidelines recommending initial treatment should include non-pharmacological interventions, such as relaxation therapy and/or cognitive behavioural therapy (CBT) (Cheuk et al, 2012; NIH, 2005).

CBT may include any combination of treatments

including sleep restriction, sleep hygiene, stimulus control, paradoxical intention (attempting to stay awake while remaining in bed) and/or cognitive restructuring (Buscemi et al, 2005: 5; Ebben and Spielman, 2009, 249; NIH, 2005). The aim of CBT is to modify poor sleep habits and change negative thoughts, attitudes and beliefs regarding sleep in the patient (Montgomery and Dennis, 2003, 4). An example of a behavioural component often utilised within CBT is sleep hygiene. Sleep hygiene aims to encourage modifying behaviour(s) the patient can perform to improve their insomnia symptoms. This may include limiting caffeine, alcohol, and/or nicotine intake, exercising on a regular basis, eating a light bedtime snack, and/or maintaining a cool, quiet and dark sleeping environment (Stepanski and Wyatt, 2003, 216).

The efficacy of CBT has been demonstrated in one RCT comparing four interventions, over an eight week period. Four treatment groups compared CBT therapy, CBT plus pharmacotherapy (zolpidem), pharmacotherapy (zolpidem) alone, and placebo. The primary outcome variable assessed was sleep-onset latency. Both the CBT and CBT plus pharmacotherapy groups demonstrated 52% reduction in sleep-onset latency from pre-treatment to post-treatment. This compared to a 17% reduction in the placebo group and a 14% reduction in the pharmacotherapy group. The CBT group was, on average, requiring 67.9 minutes to fall asleep pre-treatment. At post-treatment, this time decreased to 34.1 minutes. The CBT plus pharmacotherapy group reported 72.6 minutes pre-treatment compared to 38.7 minutes post-treatment. At the 12 month follow up, the consistently greater improvement was demonstrated again in the CBT group compared to the CBT plus pharmacotherapy group. Results demonstrated sleep-onset latency at 34.7 minutes in the CBT group, compared to the CBT plus pharmacotherapy group at 40.8 minutes. The RCT demonstrated that CBT was shown to provide adequate and greater results against CBT plus pharmacotherapy, with the additional benefit of no adverse drug effects. Another benefit of CBT was that the effects of treatment remained nearly identical to post-treatment (34.1 minutes) at the twelve month evaluation/follow-up (34.7 minutes), demonstrating that CBT provides long term efficacy in the management of insomnia (Jacobs et al, 2004, 1892-1893).

Despite CBT's effectiveness, few patients receive or are recommended CBT treatments in primary care (Morgan et al, 2004, 2). Consequently, pharmaceutical drugs are overused and commonly prescribed in the short and long term management of primary insomnia. This occurs despite known adverse side effects associated with pharmaceuticals, and the recommendation that pharmaceutical drugs should only be used intermittently, and in the short term management of insomnia (Jacobs et al, 2004, 1896; Mitchell et al, 2012, 1).

As there is conflicting evidence that conventional pharmacological treatments provide long term relief for insomnia, are commonly associated with adverse side effects, and the use of CBT is not often provided or utilised in primary care, patients may seek treatment with complementary and alternative medicine (CAM) (Cherniak, 2006, 21; Lader, 1999, S399; Morgan et al, 2004, 2). Within CAM, there are treatments

encompassing Chinese Medicine. Chinese Medicine may use a range of therapies including, but not limited to, acupuncture, acupuncture combined with moxibustion, 'Tuina', and/or Tai Chi to treat and manage primary insomnia in patients.

The etiology of insomnia, from the viewpoint of Chinese Medicine, may be attributed to various psychological, social, environmental, inherited, biological, physical, chemical and/or medical factors (Minwei, 2009, 18). In the absence of other medical conditions causing insomnia, primary insomnia is often the result of emotional strain and/or stress. Unbalanced and mismanaged emotions including anxiety, anger, worry, grief and/or guilt, may over time, enable insomnia. Other causative factors include excessive work and/or mental activity, extreme fatigue, excessive sexual activity, childbirth, irregular diet and/or a hectic lifestyle (Gao, 2010, 222; Maciocia, 2009, 409-411). All factors, either alone, or in combination with one another, act as pathogenic factors, disturbing the body's flow of Qi and Blood (Minwei, 2009, 18).

The pathology of primary insomnia may involve either excess or deficiency syndrome patterns (Maciocia, 2009, 411). Deficiency patterns include symptoms of insomnia characterised by the inability to fall and/or stay asleep, and are caused by either Blood or Yin deficiency. This may involve the Heart, Spleen, Liver and/or Kidneys. Generally, difficulty falling asleep indicates Blood deficiency of the Heart, Spleen or Liver. Insomnia caused by Yin deficiency is characterised by difficulty in staying asleep, and is frequently associated with the patient waking up several times during the night. This may be caused by Yin deficiency of the Heart, Liver and/or Kidney. Excess syndrome patterns include symptoms of restless sleep, feeling of heat, agitation, excessive dreaming/possible nightmares, and are often caused by pathogenic factors such as Heat, Fire, Phlegm-Fire and/or Blood Stagnation. Excess conditions primarily affect the Heart, Liver and/or Stomach (Maciocia, 2005, 336; Maciocia, 2009, 411).

Potential syndrome patterns may vary from sources of discussion, however, the most commonly listed patterns are: disharmony between heart and kidney, disharmony between spleen and heart, liver qi stagnation, and empty heat due to yin deficiency. (Appendix 4; Huang et al, 2009, 101; Man-Ki Poon, 2009, 1-9; Minwei, 2009, 18).

A recent systematic review evaluated the prevalence of Chinese Medicine syndrome patterns diagnosed in insomnia patients. The review concluded there were 69 different syndrome patterns commonly diagnosed, with a Deficiency of Heart and Spleen, as the most prevalent syndrome pattern diagnosed. This was followed by Hyperactivity of Fire due to Yin Deficiency, Liver Qi Stagnation transforming into Fire, and a Disharmony between the Heart and Kidney (Appendix 4; Man-Ki Poon, 2012, 4). This is conclusive with another systematic review comprised of 227 studies that resulted in 87 different syndrome patterns diagnosed in insomnia patients. Again, the top syndrome pattern diagnosed in insomnia patients according to CM theory was Deficiency of Heart and Spleen (Yeung et al, 2012, 3).

Aetiology behind a Deficiency of Heart (Blood Xu) and Spleen (Qi Xu) may be attributed to various factors;

however, primary causes include over-thinking and/or excessive worry (McDonald and Penner, 1998, 194; Meng, 2012). Clinical manifestations of Deficiency of the Heart and Spleen include insomnia with difficulty remaining asleep, frequent dreams/awakenings and difficulties falling back asleep once awake. Key non-sleep symptoms include palpitations and forgetfulness/poor memory. Other symptoms may include vertigo/dizziness, fatigue, poor appetite, abdominal distension after food intake, and loose stools. The patient also presents with a dull complexion, pale tongue with thin white coating and a thready and/or fine, weak pulse (Gao et al, 2010, 226; Huang et al, 2009, 75; Ming and Xiaoyan, 2008, 10). Treatment principles are focused on strengthening the Spleen, nourishing Blood, tonifying the Heart and calming the Mind. Acupuncture points used may include HT7, CV14, CV15, BL14, BL15 to nourish Heart Blood and settle the Mind and ST36, SP6 and BL20 to tonify the Spleen, as well as, GV20, Yintang, Anmian and Sishencong to calm the Mind and promote sleep (Maciocia, 2009, 422; Ming and Xiaoyan, 2008, 10-12; Yeung et al, 2012, 7).

A second pathology often witnessed in insomnia patients, is a Disharmony between the Heart and Kidney. Aetiology behind a Disharmony between Heart and Kidney may also be caused by several factors; however, one primary cause may result from overwork and/or having a hectic lifestyle. Along with a busy work/life balance, excessive sexual activities and/or prolonged emotional factors such as stress, worry, sadness, depression and anxiety may also enable a disharmony (Maciocia, 2005, 593, 607; Zhao and Li, 1998: 25). Symptoms of Disharmony between the Heart and Kidney include insomnia accompanied by frequent waking during the night, excessive dreaming, mental restlessness, palpitations, night sweats, five palm heat, poor memory, dizziness, headache, nocturia, backache, excessive thirst with desire for water, occasional sores in the mouth, dark urine and dry stools. The patient may present with a red tongue and red tongue tip, have scanty or little tongue coating, possible midline Heart crack, and a pulse that is rapid/thready/fine and weak/deep, especially in rear positions. Treatment principles are aimed at nourishing Yin and reducing Fire/subduing Yang, to establish harmony between the Heart and Kidney. Acupuncture points used may include HT7, Yintang to calm the mind/promote sleep, HT6, HT5 to clear Heart empty-heat and KI3, KI6, REN4 to nourish Kidney Yin, SP6 to nourish Yin and BL15 to harmonise Water of the Kidney and Fire of the Heart, when used in conjunction with KI3 (Huang et al., 2009: 75; Maciocia, 2005: 336, 607; Maciocia, 2008: 412, 424; Man-Ki Poon, 2012: 6; Minwie, 2009: 17).

A cohort study including 30 pregnant women demonstrates acupuncture's effectiveness and safety when treating insomnia. The study involved a control group, given sleep hygiene advice (avoid heavy meals, caffeine and liquids before bedtime, establish bed time routine) compared to the treatment group, given acupuncture in addition to sleep hygiene. Manual acupuncture was predominantly performed once a week, for a period of eight weeks, and included the use of HT7, PC6, GB21, Anmian, Yintang, DU20 and CV17 (Da Silva et al., 2005:

47-51). Results demonstrated a >50% reduction of sleep symptoms (difficulty in falling asleep, frequent awakenings, nightmares, early awakenings, non-restorative sleep, disruption to sleep, daytime napping) in 75% of subjects from the treatment group, compared to 30% of subjects in the control group. In addition to insomnia relief there was also the added benefit that treatment with acupuncture was of no harm to the pregnant mother and baby, as well as, resulting in no adverse side effects (Da Silva et al, 2005, 47-51).

In one RCT, the effectiveness of Tai Chi exercises was assessed in relation to outcome measures based on the Pittsburgh Sleep Quality Index Scales (PSQI) (Buysse et al, 1988, 193-213; Li et al, 2004, 892-900). Subjects included older adults (60+) whom participated in either a six month Tai Chi exercise program, or a six month low impact exercise program. In the Tai Chi group, results provided significant improvement from pre-treatment to post-treatment intervention measurements in five of the PSQI scales ($P < .001$), which included sleep quality, sleep-onset latency, sleep duration, sleep efficiency and sleep disturbances, compared to no, or little, improvements in the low impact exercise group. Tai Chi was particularly efficacious in reducing sleep onset latency times by 18 minutes per night, as well as, increasing sleep duration by 48 minutes per night (Li et al, 2004, 892, 898).

Ongoing management of primary insomnia within Chinese Medicine may include a combination of Chinese Medicine therapies used in conjunction with one another (Huang et al., 2009: 76). A study comparing drug therapy to acupuncture combined with moxibustion demonstrated efficacy in insomnia relief when acupuncture and moxibustion was provided (Yan-Li et al, 2009, 95-96). The treatment group were treated with acupuncture plus moxibustion and the control group were given estazolam (benzodiazepine). Duration of treatment totalled ten days in both groups, with the treatment group receiving acupuncture plus moxibustion treatment for 30-60 minutes per day. This involved suspended moxibustion held vertically over DU20 and Sishencong, in addition to needling at acupuncture points (Taiyang, PC6, GB20). In the treatment group (acupuncture + moxibustion), efficacy on outcome measures of 90% was demonstrated for relief in sleep symptoms associated with insomnia, compared to an 80% improvement on outcome measures in the control group (drug treatment). The study demonstrated the greater improvement was displayed in the treatment group, which also had the added advantage of not consuming a pharmaceutical drug (Yan-Li et al, 2009, 95-96).

Another study demonstrating efficacy when Chinese Medicine therapies are combined, incorporates Tuina in conjunction with acupuncture plus moxibustion. This combination of treatments, demonstrated greater efficacy for insomnia symptoms when compared to acupuncture and moxibustion alone. The treatment group received acupuncture treatment according to Chinese Medicine principles for treatment of Heart and Spleen Deficiency. Acupuncture included the use of HT7, SP6, SP9, BL14, BL15, and BL20. Moxa was placed on acupuncture points BL15 and BL20. Tuina was performed daily after acupuncture and moxa treatment. The control group

received acupuncture plus moxibustion only to the above points. Results showed greater efficacy and complete relief of insomnia in 41 of the 49 subjects from the treatment group (Tuina+acupuncture+moxibustion). This compared to only 15 of the 43 subjects from the control group receiving greater improvement and/or complete insomnia relief (Ming and Xiao-yan, 2008, 10-12).

In summary, primary insomnia is a complex condition that presents with challenges in clinic settings. An appropriate approach to treatment within Western Medicine includes the use of CBT, exercise and other non-pharmacological therapies. These modalities of treatment, in contrast to pharmaceuticals, demonstrate efficacy in the long term management of primary insomnia and have little or no adverse side effects. However, they are not often provided for the majority of insomnia patients. Chinese Medicine therapies including acupuncture, acupuncture combined with moxibustion, Tuina and Tai Chi, have demonstrated equal, if not greater relief for primary insomnia patients, without the adverse side effects often associated with pharmaceuticals. For the majority of primary insomnia patients, a combination of Chinese Medicine therapies, psychological interventions (CBT), exercise and lifestyle changes including diet, and an appropriate work/rest balance, may provide enhanced results with long term efficacy in the treatment of primary insomnia.

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[Appendix 1 – 4 are not included due to page limit]

Student Work: Excellent Case

Endometriosis, a current review on its managements with acupuncture

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Key Words: Endometriosis, Acupuncture

Endometriosis derives from the Latin words for inside and uterus (Nassif et al, 2011, 25). It was first identified by Daniel Shroen in 1690 by describing it as ‘womb sores’ that affected the bladder and bowel (Mao and Anastasi, 2010, 109). It was further elaborated in 1908 when Thomas Cullen performed surgery on menstruating women (Farrell and Garad, 2012, 37). Since then, the knowledge of this condition has increased, however much is still unknown despite the fast medical advances nowadays (Arnold et al, 2012, 132).

Endometriosis is a complex disorder affecting approximately 10-15% (Farrell and Garad, 2012, 37) of women, although exact prevalence figures are still unknown (Rozsnyai et al, 2011, 339-341). It can occur at any age from menarche to menopause (Kumar et al, 2012, 6-12), however it is most commonly diagnosed between the ages of 20 to 40 (Mao and Anastasi, 2010, 110).

Endometriosis is where parts of the endometrial tissue and cells (Bloski, 2008, 384) escape the uterus and attach themselves elsewhere in the body (Arnold et al, 2012, 132). Once fixed, the ‘implants’ react to hormones (Noll et al, 2010, 263-274) such as progesterone and oestrogen (Selçuk and Bozdağ, 2013, 98-103) and ‘bleed’ (Jin, 1998, 171-77); which creates an inflammatory response (Bloski, 2008, 384) and scar tissue to arise which damages the attachment site (Noll et al, 2010, 263-274). These ‘implants’ can attach anywhere in the body such as the brain, nose and lungs (Bloski, 2008, 384) but most commonly are found within the pelvic cavity and its organs where local immigrating is easy (Thibodeau and Patton, 2010, 625).

As the disorder is not fully understood, its causes are

not clear as well. However, a few factors have been identified that may increase the risk of developing endometriosis; these include: early menarche, late menopause (Mao and Anastasi, 2010, 110), menstrual irregularities (Maciocia, 2011, 850) and family history, especially if it is a close blood relative such as mother or sister (Farrell and Garad, 2012, 37-9).

A normal menstrual cycle lasts 28 days and is cyclic beginning in the teens and finishing completely around the 50's (Better Health Channel, 2013). This multifaceted process is completely under hormonal control and has 4 phases (Thibodeau and Patton, 2010, 625). It is during the Luteal and Menstrual Phase that endometriosis is said to be most predominant (Kumar et al, 2012, 6-12) due to the changing levels of progesterone and oestrogen in the system (Bloski, 2008, 385), as well as the endometrium sloughing off to be shed (Thibodeau and Patton, 2010, 618).

The exact pathophysiology of Endometriosis is unknown (Farrell and Garad, 2012, 37-9); however there are many hypothesis (Mao and Anastasi, 2010, 110). The Retrograde Menstruation seems the most popular one among all of them. This is where endometrial cells are forced moving into the fallopian tubes during menstruation and end their journey in peritoneal cavity, instead of flowing downwards through the cervical and be discharged (Maciocia, 2011, 849). However this hypothesis does not explain the presence of lesions in remote areas of the body (Bloski, 2008, 384). Another key idea is Coelomic Metaplasia; this is where cells already in the peritoneal cavity transform into endometrial cells (Mao and Anastasi, 2010, 110) and then

evolves into endometrial tissue (Maciocia, 2011, 849). The exact trigger and pathogenesis of this transformation is currently unidentified, but a link has been established with an embryonic precursor for both types of cell (Bloski, 2008, 385). Other theories of pathophysiology include Genetics (Maciocia, 2011, 849), immune system involvement (Bloski, 2008, 385) and endometrial tissue entering the blood and lymphatic vessels where it is transported outside of the uterus (Maciocia, 2011, 849). As well as the use of tampons, Intra-uterine Contraceptive devices and intercourse during menstruation were all linked to the development of the disorder, which physically cause reverse flow of the contents in the uterus; however, these are all unconfirmed (Maciocia, 2011, 849).

Endometriosis is categorized into 4 stages based on the depth and location of lesions and established through laparoscopic findings (Mao and Anastasi, 2010, 110). A type of endometriosis is given based on the 4 stages; these are: Peritoneal, Ovarian and Rectovaginal. However the type of endometriosis has no bearing on the amount of pain and other symptoms experienced by the patient (Bloski, 2008, 388).

The main symptoms of Endometriosis are Pain, Infertility and menstrual issues; although many can be asymptomatic (Maciocia, 2011, 851). Endometriosis is currently the most common cause of pelvic pain and infertility in all menstruating women according to Mao and Anastasi (2010, 109). Typically the symptoms are associated with the location of the implants and the damage they do there (Nassif et al, 2011, 25-33).

There are many types of pain associated with endometriosis, ranging from Dysmenorrhoea to Dyschezia (Nassif et al, 2011, 25-33) with the cause being an inflammatory response and nerve fibre involvements in the implantation site (Arnold et al, 2012, 138; Bloski, 2008, 389). The severity of the pain will vary from patient to patient and can range from mild pain to debilitating (Farrell and Garad, 2012, 37-9). The type of pain is often described as intermittent, sharp and crampy coming in spasms and worse in the mornings or evening (Highfield et al, 2006, 319); this is likely due to the endometrial tissue contracting cyclically (Better Health Channel, 2013). The location of the pain is most commonly in the suprapubic region along the Ren Mai channel (Farrell and Garad, 2012, 37-9). However it may radiate to other areas such as the abdomen, thighs and lower back (Noll et al, 2010, 263). The onset is usually linked to the ovulatory cycle and would begin around 1-2 days prior to menstruation and subside after the bleeding stops (Mao and Anastasi, 2010, 110-111). However this can fluctuate to include pain during other times such as during sexual intercourse, urination, defecation or when passing wind (Thibodeau and Patton, 2010, 625).

The pain can also be accompanied with other symptoms such as gastrointestinal issues (Bloski, 2008, 386), tender and enlarged ovaries (Maciocia, 2011, 851), abdominal bloating (Black and Fraser, 2012, 114-7); cyclical bowel and bladder issues (Mao and Anastasi, 2010, 110) such as bleeding, irregular habits, frequency and output differences (Farrell and Garad, 2012, 37-9) headaches, fatigue and mood changes (Highfield et al, 2006, 319). These also are dependent on the location of

the endometrial tissue and cells (Maciocia, 2011, 851).

As well as the pain during menstruation which is known as Dysmenorrhoea (Better Health Channel, 2013); there are menstrual irregularities associated with endometriosis (Bloski, 2008, 386). These include variations to menstrual blood amount and duration (Black and Fraser, 2012, 114-7) from light spotting to excessive heavy flow although the blood is usually dark red (Farrell and Garad, 2012, 37-9). Occasionally this can be bright red, but this is usually due to a change in hormones from medication (Ferrari et al, 2012, 699-703). Also with endometriosis there are multiple dark clots within the menstrual blood that vary in size (Mao and Anastasi, 2010, 110).

Due to the endometrial adhesions damaging the structures it attaches to and impacting on ovulation (Mao and Anastasi, 2010, 110), sterility is often a common symptom of endometriosis (Bloski, 2008, 386). Fang et al (2012, 5) states that the most common site of involvement is the ovaries resulting in impaired folliculogenesis which will prevent the ovum from being fertilized, thus causing infertility (Thibodeau and Patton, 2010, 625; Noll et al, 2010, 263-274). However Nassif et al (2011, 25-33) states that endometriosis does not cause infertility but rather subfertility as it is rarely absolute. However it is present in 20-30% of endometriosis patients (Selçuk and Bozdağ, 2013, 98-103) which would show a strong correlation between endometriosis and infertility (Farrell and Garad, 2012, 37-9) especially as this is usually the key reason for diagnosis rather than the pain (Rozsnyai et al, 2011, 339-341).

The diagnosis of endometriosis is usually delayed (Nassif et al, 2011, 25-33) from the onset of symptoms due to patients thinking their pain is 'normal' (Bloski, 2008, 390), this is because it often begins at menarche and they have known no other (Farrell and Garad, 2012, 37-9). Therefore diagnosis is usually made secondary to other conditions such as infertility, gastrointestinal issues, hormonal or autoimmune disorders (Bloski, 2008, 384) or due to endometrial complications such as adnexal masses, adhesions or referred pain (Mao and Anastasi, 2010, 112; Bloski, 2008, 386).

Diagnosis is usually made via laparoscopic and biopsy findings (Maciocia, 2011, 852) however early biomarkers may be picked up via urinalysis and blood tests (Farrell and Garad, 2012, 37-9), or via transvaginal ultrasound scan (Black and Fraser, 2012, 114-7).

Differentiation is also required as the symptoms can mimic those of Pelvic Inflammatory Disease, Ovarian Tumours (Bloski, 2008, 387), Adenomyosis (Jin, 1998, 171-77) Irritable Bowel Syndrome (Bloski, 2008, 389), Bladder Cancer and Interstitial Cystitis (Nassif et al, 2011, 25-33). However, majority of symptoms for endometriosis will be cyclical whereas these conditions are not under hormonal control (Black and Fraser, 2012, 114-7).

Evidence suggests that endometriosis can increase the risk of developing breast cancer (Bloski, 2008, 384) or ovarian cancer (Mao and Anastasi, 2010, 111).

The Western Medicine treatment of endometriosis includes medications or surgery (Mao and Anastasi, 2010, 114). The aim is usually to stop the menstruation so that

no further endometrium can escape and the current lesions can recede (Maciocia, 2011, 853); while using further medication to ease the pain and other symptoms (Farrell and Garad, 2012, 37-9). The main medications usually prescribed are Combined Contraceptive pill (Black and Fraser, 2012, 114-7), Progestin's (Wong and Lim, 2011, 163-170), Intrauterine devices, Gonadotropin-Releasing hormone Agonists (Maciocia, 2011, 854), Androgen hormones and Aromatase inhibitors (Nassif et al, 2011, 25-33).

Surgery is often given prior to beginning medication to destroy and remove any endometrial lesions, cells or nodules (Kruse et al, 2012, 648-657). The medication is then used to help prevent recurrence (Selçuk and Bozdağ, 2013, 98-103); however this will often lower the patients chances of conceiving (Maciocia, 2011, 857). Surprisingly a recommended treatment for endometriosis is to become pregnant as the symptoms of endometriosis are eased by the hormones released in pregnancy and during lactation (Black and Fraser, 2012, 114-7). However the activation and growth of endometrial lesions occurs soon after breast feeding stops (Farrell and Garad, 2012, 37-9) and 10-20% of all endometriosis recurs after treatment regardless of treatment type (Farrell and Garad, 2012, 37-9).

The use of Chinese Medicine (CM) is an effective way to manage the patient's pain (Black and Fraser, 2012, 114-7) as well as for the other symptoms (Xue et al, 2010, 301-312). Given that endometriosis is likely to recur (Wong and Lim, 2011, 163-170) long-term management of symptoms is required, as it has been noted that even after a hysterectomy or menopause, patients have still experienced difficulties with this condition (Selçuk and Bozdağ, 2013, 98-103).

According to Xue et al (2010, 301-312) acupuncture is relatively safe in treating endometriosis pain with minimal side effects and less invasive (Schnyer et al, 2008, 516) especially when compared to Western Medicine Treatments which cannot be used long-term due to their risks to health (Wayne et al, 2008, 248) and have many side effects in the short-term (Fang et al, 2012, 1; Highfield et al, 2006, 317). Also the body can build a tolerance to these medications limiting their use further (Nassif et al, 2011, 25-33).

Acupuncture has been found to not only treat the symptoms of endometriosis but also improve the patients overall Quality of Life (Highfield et al, 2006, 318) especially in young adults where the psychological, social and emotional health will be severely impacted from living with daily pain (Farrell and Garad, 2012, 37-9). It also improved fertility which would further reduce endometrial pain (Kang et al, 2011, 347).

Also early research suggests that Chinese Herbal Medicine may be more effective than the Western medications in treating endometriosis itself by shrinking the endometrial tissue and easing pain when combined with a herbal enema however this needs further research to be fully substantiated (Danforn Lim and Liu, 2011, 18).

The disorder was not recorded in ancient Chinese medicine documents, the closest disease acknowledged would be Ji Ju or Inner Accumulation (Noll et al, 2010,

263-274) which refers to a pattern of Qi Stagnation and Blood Stasis leading to Dysmenorrhoea (Maciocia, 2004, 401-859).

The aetiology of endometriosis is multifaceted and believed to derive from Sexual intercourse, Pathogenic Factors, Emotions and lifestyle (Highfield et al, 2006, 321). In terms of sexual intercourse, pathology is thought to arise from having sexual relations while menstruating as this causes the natural flow of blood to become blocked leading to stagnation within the womb. Another theory is that intercourse within 2 years of puberty beginning can lead to blood stasis in the uterus as the Chong and Ren are underdeveloped and undernourished (Maciocia, 2011, 858). The most prevalent pathogenic factors in endometriosis are Cold, Damp and Heat (Kuoch, 2011, 194). While it is well known that emotions can cause Qi to Stagnate and Yang to go the wrong way (Maciocia, 2005, 243), emotional stress can directly cause blood stasis through stagnation of liver Qi (Maciocia, 2011, 858). The patient's lifestyle is very pertinent to diagnosis and differentiation, working or training excessively especially in puberty can weak spleen and kidneys which then cannot fully nourish Liver blood and the Ren or Chong channels which can cause stagnation in the uterus (Maciocia, 2011, 858). If left untreated this would develop into blood stasis and as most cases of endometriosis are not diagnosed until adulthood (Nassif et al, 2011, 25-33), this is most likely a cause.

The pattern most associated is Blood Stasis (Maciocia, 2005, 225-228) in the Ren and Chong Mai (Noll et al, 2010, 263-274) failing to nourish the Uterus (Highfield et al, 2006, 317-322). This stasis can then lead to other patterns such as Pathogenic factors and other deficiencies like Liver Qi Stagnation, Kidney Yang Xu, Damp-heat in lower Jiao (Noll et al, 2010, 263-274) Cold Retention or Heat Stagnation (Han et al, 2009, 65). According to Maciocia (2011, 859) the organs most involved in the pathology of endometriosis are the kidney, liver or spleen (Qing and Stimson, 2008, 36 & 68). These organs are the main three responsible for menstruation and sexual maturity (Maciocia, 2005, 225-228) through the Blood, Qi and Jing (Kuoch, 2011, 191) and then nourishing the Ren, Chong and Uterus (Maciocia, 2005, 225-228).

Given the implicated organs and patterns the expected tongue in endometriosis would be purple at the root, sides or centre and if Damp is present may be swollen (Noll et al, 2010, 263-274). Another indication of the blood stasis would be congested sublingual veins. Other significant findings on the tongue would suggest the pathogenic factor involved and to what state rather than the endometriosis itself (Noll et al, 2010, 263-274). The expected pulse would be Wiry if in pain, weak due to the deficiency or possibly knotted due to the chronic nature and obstruction to Qi and Blood (Highfield et al, 2006, 319).

Therefore the treatment would be to nourish the Liver-blood, Kidney Jing and Spleen Qi (Han et al, 2009, 65). This is achieved by clearing blood stasis, nourishing and Moving Blood & Qi and promoting their smooth flow through the Chong and Ren Mai (Maciocia, 2011, 860). Also treatment should aim Damp, Heat or Cold and support the Heart, Kidney, Spleen, Liver and Lung

(Highfield et al, 2006, 319). Based on this; all the recommended points for endometriosis are: LU7; LI-4 and LI-11; ST28, 29, 30 and 36; SP4, 6, 8 and 10; LR3 and 8; GB 26, 27 and 37; NL32, 62 and 67; KI-3, 6, 7, 12, 13 and 14; PC6; HT7; RN2, 3 and 4; DU4 and 20, Zigong and Duyin (Han et al, 2009, 68; Kuoch, 2011, 151-2; Wayne et al, 2008, 250).

However points such as RN2, RN3 and KI-12 would not be selected for general treatment due to the level of nudity in the point's location and some would also exclude Stomach30 however the benefit outweighs the nudity on that particular point (Lian et al, 2012, 70). Other points such as GB37, BL32 or KI-7 would also be excluded as the benefits of these points are better produced by the other points although they do stimulate oestrogen and the ovaries (Kuoch, 2011, 152).

The treatment is founded on the paired notion of Yin Yang, and would require looking at the patient's individual symptoms and whereabouts they are in their menstrual cycle (Han et al, 2009, 65-66).

So, just before menstruation is due to begin around the luteal phase of the cycle (Better Health Channel, 2013), it is best to select points that can regulate the middle and lower Jiao such as ST28, ST29 and KD14 (Maciocia, 2011, 862) as well as points for the Ren, Chong and Uterus such as LU7, GB26, ST30, KD13, SP4 and Zigong (Lian et al, 2012,). Also points that promote Blood production and circulation or the Liver organ are recommended such as SP6, SP10, ST36, LR8 and PC6 (Qing and Stimson, 2008). Finally any points that clear damp, cold or heat are recommended these include: BL62 and LI11 (Deadman et al, 2008).

During the menstrual phase or 'bleeding' part of the cycle the point selection would be aimed at warming the menses and easing cramps using LI4, LI11, KD6 and PC6 (Jarney and Bourantinos, 2008) also by promoting the middle Jiao by selecting SP4, SP8, ST36 and Duyin (Deadman et al, 2008). Finally KI-3, LR3, BL62 and DU20 (Kuoch, 2011) is added to aid the other symptoms. Points to nourish blood like SP6 or 10 (Grant and Ma, 2003, 11) are not recommended here due to excessive blood loss or the possibility of pregnancy (Jin, 1998, 171-77).

Straight after menstruation during the follicular and ovulatory phase (Better Health Channel, 2013) it is best to Nourish Kidneys and Spleen by using KD3, SP6, SP8, ST36, LI-11, and DU4 (Han et al, 2009, 65-66). Also it is best to Nourish the Kidney essence and promote the original Qi by using REN4, BL67, ST29, LI4, KD14, BL62 and LR8 (Lian et al, 2012). Additionally, to eliminate any further Qi Stagnation or Blood Stasis as well as restoring general balance to the Zang Fu Organs and Yin Yang use SP4, SP6, LI4 and GB27 (Qing and Stimson, 2008, 78). Finally PC6, HT7 and LR3 are used to promote the Shen and Heart function which relieves depression and helps with mood and emotions (Deadman et al, 2008; Fang et al, 2012, 9).

Also recommended to send the patient home with ear seeds (Qing and Stimson, 2008, 129); this would be on Uterus point however this can only be used when the patient is not menstruating (Grant and Ma, 2003, 11). Other points would include Shenmen, the Liver, the Kidney and the Sympathetic points (Kang et al, 2011,

347). It is best to use only one ear starting with the most affected side and alternating to a maximum of five times (Han et al, 2009, 68). The patient should also have regular treatment for approximately 7 weeks to 3 months to gain full benefit and then every quarter to prevent reoccurrence (Highfield et al, 2006, 318). This is especially required if the patient is to combine Western treatment with Chinese Medicine as the medications cause further deficiency and blood stasis (Han et al, 2009, 67) which obstructs the uterus (Noll et al, 2010, 263-274) and depletes the Kidney causing recurrence and more pain (Maciocia, 2011, 857).

Long-term management of endometriosis in terms of TCM would mean lifestyle changes such as changing the diet, exercising more, having better stress management and continuing treatments (Maciocia, 2005, 225-228). Weight control measures are one of the key issues that both Western Medicine and Tradition Chinese Medicine recommend tackling. For endometriosis, any weight issues such as obesity or anorexia increases the menstrual irregularity and adversely affects the hormones worsening the symptoms and pain (Thibodeau and Patton, 2010, 618-625) as well as causing excessive heat, damp and phlegm and causing Qi or Yin deficiency (Maciocia, 2005).

The exercise most recommended for weight control and endometriosis are those that strengthen the body, increase the blood and Qi flow through the channels and help expel pathogenic factors. These include: Qi Gong, Tai Chi, Yoga, Swimming and Brisk Walking (Qing and Stimson, 2008, 62) and should be done for 5 to 30 minutes at least 2-4 times a week (Farrell and Garad, 2012, 37-9).

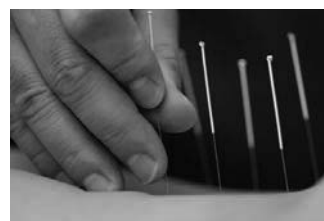
The best diet for prevention of endometriosis includes one rich in whole grains, plant oils, fish, poultry, eggs, nuts, legume, fruits and vegetables (Qing and Stimson, 2008, 43). The foods best to avoid are greasy foods as they can lead to internal dampness which could further block the channels and increase the blood stasis causing recurrence of endometrial tissue (Maciocia, 2005, 225-228). Also hot foods such as spicy, BBQ and roasted (Kuoch, 2011, 323) or cold foods such as raw foods or slushy's (Kuoch, 2011, 194) would increase endometrial pain through their response on yin yang and pathogenic factors (Qing and Stimson, 2008, 62).

Finally, for endometriosis in general Qing and Stimson recommend eating as many black, red or soya beans as possible as these strengthen the Kidneys, warm the middle and lower Jiao and promote circulation (Qing and Stimson, 2008, 46).

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对经络学说演变历史的研究

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经络学说出现至今已经超过两千年, 古代医家对经络的认识有清晰的演变轨迹, 元代之前和元代以后对经络的认识截然不同。经过用现代科学近六十年的研究, 我认为必将再出现新的演变。认清经络学说的演变过程与发展趋势, 对我们研究经络是十分重要的。

作者近几年来, 系统研读了从《灵枢》、《素问》、《难经》、《足臂十一脉灸经》、《阴阳十一脉灸经》、《针灸甲乙经》、《备急千金要方》、《铜人针灸经》、《明堂灸经》、《针灸资生经》、《十四经发挥》、《针灸大成》、《医宗金鉴》和当代的《针灸学》、《经络学》教材等等涉及针灸、经络和俞穴的二十多部重要中医书籍, 并将其有关经络和俞穴的内容进行系统梳理, 明白了中医发展史上对经络认识的演变过程。现简要讨论如下。

一. 元代之前的经络系统存在两套循行路线

(一) 人体深层的经络路线是气血循环运行的通道

1. 经络和气血的关系

经络在《灵枢》、《素问》等书中分别称为经脉和络脉, 经脉口 络脉都是脉。《素问·脉要精微论》说: “夫脉者, 血之府也。” 也就是说, 脉里面流动的是血。

至于血的来源, 《灵枢·痈疽》说: “中焦出气如露, 上注溪谷, 而渗孙脉。津液和调, 变化而赤为血。血和则孙络先满溢, 乃注于络脉; 络脉皆盈, 乃注于经脉。” 十分具体地描述了营气出自中焦, 先进入组织间隙(溪谷), 然后进入孙络, 与津液结合, 变化为红色的血。然后注入络脉, 待络脉中的血充盈之后, 再注入经脉, 参与全身的血液循环。脉中流动的血里面, 包含着营气和津液, 故称气血。

由于气血出自中焦, 所以十二经脉从中焦开始, 首条手太阴肺经就 “起于中焦”。

2. 经脉中气血的运行途径和体表可触及之处

《灵枢·经脉》描述了人体深层经脉中气血的运行, 周而复始, 如环无端。其顺序为: 手太阴肺经 → 手阳明大肠经 → 足阳明胃经 → 足太阴脾经 → 手少阴心经 → 手太阳小肠经 → 足太阳膀胱经 → 足少阴肾经 → 手厥阴心包经 → 手少阳三焦经 → 足少阳胆经 → 足厥阴肝经 → 手太阴肺经 → ……。十二经脉运行在人体的深部, 在体表是看不到的。《灵枢·经脉》说: “经脉十二者, 伏行分肉之间, 深而不见。其常见者, 手太阴过于外踝之上, 无所隐故也。”

由于经络把气血送到全身, 使脏腑、形体、九窍皆得滋养, 才能发挥各自的功能。所以《素问·五脏生成篇》说: “肝受血而能视, 足受血而能步, 掌受血而能握, 指受血而能摄。”

经络在体表可以触及的部位不少, 《素问·三部九候论》说: “有下部, 有中部, 有上部。部各有三候, 有天, 有地, 有人也。必指而导之, 乃以为真。上部天, 两额之动脉; 上部地, 两颊之动脉; 上部人, 耳前之动脉。中部天, 手太阴也; 中部地, 手阳明也; 中部人, 手少阴也。下部天, 足厥阴也; 下部地, 足少阴

也; 下部人, 足太阴也。故下部之天以候肝, 地以候肾, 人以候脾胃之气。” 此外, 在《素问》、《灵枢》、《难经》和历代中医古籍中还多次提及 “人迎” 和 “趺阳” (皆为足阳明之脉) 等可触及动脉之处。

3. 经脉的长度, 古代发现经脉的方法和气血运行速度

关于人体经脉的长度, 《灵枢·脉度》说: “手之六阳, 从手至头, 长五尺, 五六三丈; 手之六阴, 从手至胸中, 三尺五寸, 三六一丈八尺, 五六三尺, 合二丈一尺; 足之六阳, 从足上至头, 八尺, 六八四丈八尺; 足之六阴, 从足至胸中, 六尺五寸, 六六三丈六尺, 五六三尺, 合三丈九尺; 跷脉从足至目, 七尺五寸, 二七一丈四尺, 二五一尺, 合一丈五尺; 督脉、任脉, 各四尺五寸, 二四八尺, 二五一尺, 合九尺。凡都合一十六丈二尺, 此气之大经隧也。”

至于如何知道人体经脉的长度, 《灵枢·经水》说: “若夫八尺之士, 皮肉在此, 外可度量切循而得之, 其死可解剖而视之。其脏之坚脆, 腑之大小, 谷之多少, 脉之长短, 血之清浊, 气之多少, 十二经之多血少气, 与其少血多气, 与其皆多血气, 与其皆少血气, 皆有大数。”

关于气血在脉中流动的速度, 《灵枢·五十营》说: “人经脉上下左右前后二十八脉, 周身十六丈二尺, 以应二十八宿。漏水下百刻, 以分昼夜。故人一呼, 脉再动, 气行三寸; 一吸, 脉亦再动, 气行三寸; 呼吸定息, 气行六寸; 十息, 气行六尺, 日行二分。二百七十息, 气行十六丈二尺, 气行交通于中, 一周于身; 下水二刻, 日行二十五分。五百四十息, 气行再周于身; 下水四刻, 日行四十分。二千七百息, 气行十周于身; 下水二十刻, 日行五宿二十分。一万三千五百息, 气行五十营于身; 水下百刻, 日行二十八宿, 漏水皆尽, 脉终矣。”

4. 十二正经与奇经八脉

历代医书中, 多数把十二正经视为流行全身气血的通道, 而把奇经八脉作为储存和调节全身气血的空间。如《难经·二十七难》说: “脉有奇经八脉者, 不拘于十二经, 何也? 然: 有阳维, 有阴维, 有阳跷, 有阴跷, 有冲, 有督, 有任, 有带之脉。凡此八脉者, 皆不拘于经, 故曰奇经八脉也。” 又说: “经有十二, 络有十五, 凡二十七气, 相随上下, 何独不拘于经也? 然: 圣人图设沟渠, 通利水道, 以备不虞。天雨降下, 沟渠溢满, 当此之时, 滂霂妄行, 圣人不能复图也。此络脉满溢, 诸经不能复拘也。”

(二) 俞穴多在溪谷内, 为十二经脉脉气所发之处

《素问·气穴论》和《素问·气府论》十分清楚地说明, 人体的365俞穴, 都是经脉所发出的 “脉气” 到达之处, 故名 “气穴”。如《素问·气府论》说: “足太阳脉气所发者, 七十八穴…; 足少阳脉气所发者, 六十二穴…; 足阳明脉气所发者, 六十八穴…”。《素问·气穴论》说: “气穴三百六十五, 以应一岁”。

俞穴的位置不在经脉之上, 而多在筋骨肌肉的缝隙之中, 即溪谷之内, 故称 “谿谷三百六十五穴, 亦应一岁”; 同时, 经络的最细分支, 即孙络, 常常延伸到俞穴内, 所以又称 “孙络三

百六十五穴会，亦以应一岁”。并一再提及这些穴位都是“游针之居”，“微针所及”，“针之所由行也”，也就是说这些俞穴主要都是用于针刺治疗的部位。

因此，我们必须明确，俞穴并不在人体深部的经脉上，而是在溪谷之中。因为它是十二经脉脉气所到达之处，所以被称作“气穴”与深部的十二经脉之间，依靠脉气紧密地联系着。

后世医家继承了《素问》的认识，如《针灸甲乙经·针灸禁忌第一》：“凡刺之道，必中气穴，无中肉节。”

(三) 人体浅层的经络是俞穴间脉气流通的路线

每一个气穴里都存在着发自深层经脉的“脉气”，这种脉气还在俞穴之间流动。

属于五脏的手太阴肺经、手少阴心经、足太阴脾经、足少阴肾经和足厥阴肝经等阴经，其经气都按照井、荣、腧、经、合的次序，依次流注。如《灵枢·本输》：“肺出于少商，少商者，手大指端内侧也，为井木；溜于鱼际，鱼际者，手鱼也，为荣；注于太渊，太渊，鱼后一寸陷者中也，为腧；行于经渠，经渠，寸口中也，动而不居为经；入于尺泽，尺泽，肘中之动脉也，为合。手太阴经也。”其它属于五脏的阴经，流注的次序也是如此。井、荣、俞、经、合这五个穴位，被称为五俞穴。属于五脏的五条经脉各自有五俞穴，故称“五脏五俞”，五五二十五穴左右凡五十穴。其流注的方向，都是从四肢末端向心方向流动。与《灵枢·经脉》的手三阴经的流向相反。

属于六腑的手阳明大肠经、手太阳小肠经、手少阳三焦经、足阳明胃经、足太阳膀胱经、足少阳胆经等六条阳经，其脉气都按井、荣、俞、原、经、合的次序依次流注。如《灵枢·本输》：“胃出于厉兑，厉兑者，足大指内，次指之端也，为井金；溜于内庭，内庭次指外间也，为荣；注于陷谷，陷谷者，上中指内间，上行二寸陷者中也，为俞；过于冲阳，冲阳，足跗上五寸陷中也，为原；摇足而得之，行于解溪，解溪上冲阳一寸半陷者中也，为经；入于下陵，下陵膝下三寸胫骨外三里也，为合；……是足阳明也。”其它属于六腑的阳经，其流注次序也是如此。井、荣、俞、原、经、合被称为六俞穴，属于腑的六条阳经各有六俞穴，故称“六腑六俞”，六六三十六穴，左右凡七十二穴。其流注方向，也是都从四肢末端向心流动的。与《灵枢·经脉》足三阳经的流向相反。

后世许多医书，在描述人体浅表经脉脉气流向时，都将其流向描述为从四肢末端向心流动。例如晋代的《针灸甲乙经·手厥阴心主及臂凡一十六穴第二十五》：“手心主之脉，出于中指之端。内屈中指内廉，以上留于掌中，伏行两骨之间。外屈两筋之间，骨肉之际，其气滑利，上二寸，外屈行两筋之间，上至肘内廉。入于小筋之下，两骨之会上。入于胸中，内络心包。”这不但对十二经脉脉气在体表流通的路线作了具体地描述，而且还说明，其脉气流行的路线与所属之内脏相通。隋唐时代的《备急千金要方》，宋代的《铜人针灸经》等对体表经络的描述皆与此相同。

宋代《铜人针灸经·卷一》还归纳说：“手三阳之脉，从手至头；手三阴之脉，从手至胸；足三阳之脉，从足至头；足三阴之脉，从足至胸。”皆与上述《灵枢·本输》的论述相一致。

在湖南长沙马王堆汉墓出土的《足臂十一脉灸经》和《阴阳十一脉灸经》中，其经脉的走向与气穴之间脉气的流动方向绝大

多数是一致的。除《阴阳十一脉灸经》中的肩脉之外，所有经脉都是从四肢末端向心流动的。

当上述古书描述脉气在俞穴之间流动时，只谈到气，从来没有提到血，可见脉气是无形的。关于脉气流通的道路，在上述古书中，也从未见到“经隧”之类的字眼，可见这条路也是肉眼所看不到的。似乎这股无形的经脉之气只是穿行于皮肉之中，从一个气穴，向下一个气穴流动，不停地穿行，形成了一条无形的道路。

概括起来说，深部的十二经脉各自发出经脉之气，到达属于这条经脉的气穴内。然后，气穴里的脉气开始流动，按照井、荣、输、（原）、经、合的顺序，从四肢末端流向躯干，而后进入属于该经络的内脏，从内脏又汇入深层的十二经脉。这样的循环，使深层的经络和浅层的经络不停地交流，起着沟通表里内外的作用。

二. 元代之后深层经络和浅层经络被合为一体

(一) 一套经络路线，流行气血，沟通内外，营养并联系全身

自元代之后，如《十四经发挥》、《针灸大成》和《医宗金鉴》等重要医籍中，都不再把十二经脉在体内的气血循环和体表经络脉气的向心流注分别叙述，而是将经络的循行路线一律按《灵枢·经脉》的经脉路线进行描述。即按手太阴肺经（从胸走手）→手阳明大肠经（从手走头）→足阳明胃经（从头走足）→足太阴脾经（从足走胸腹）→手少阴心经（从胸走手）→手太阳小肠经（从手走头）→足太阳膀胱经（从头走足）→足少阴肾经（从足走胸腹）→手厥阴心包经（从胸走手）→手少阳三焦经（从手走头）→足少阳胆经（从头走足）→足厥阴肝经（从足走胸腹）→手太阴肺经……。在头部和胸腹部的经络可联系脏腑和诸窍，在四肢的经络则与肢节相联络，共同发挥运行全身气血，联络脏腑肢节，沟通上下内外的功能。

(二) 经络与俞穴一体

不同于元代之前把体内气血循环和俞穴之间的脉气流通分开叙述，而是直接把十二经脉的俞穴串在运行气血的经脉上。这样安排，就把脏腑、气血、经脉和俞穴全部一体化。

(三) 经络中的气血循环往复，只强调一种流向

元代之后的经络流向全是“手之三阴，从胸走手；手之三阳，从手走头；足之三阳，从头走足；足之三阴，从足走腹”，而不存在体表经络脉气向心流动的描述。

每条经脉上的井、荣、输、原、经、合等穴也被提及，但是与经脉的气血循环是什么关系，未见明确而系统地叙述。

三. 讨论

如上所述，元代之前中医把经络分为深层的气血循环路线和浅层的脉气流通路线，全盘地接受了《灵枢》和《素问》的理论；元代之后，浅层脉气流通路线被淡化，只强调《灵枢·经脉》的流向。孰是孰非，需要讨论。

作者自学习中医以来，长期接受的都是元代之后的经络理论，但是这种理论，的确令人深感困惑，很多地方甚至无法自圆其说。现在提出来和大家一起讨论。

(一) 血和经络究竟是什么关系？

经是经脉，络是络脉，经络都是脉。如果你相信《素问》的话“脉者，血之府也”，那么经络里应该充满了血。但是针刺在经络上，并不见血，如何解释？

按照元代以前的理论，你刺的是浅层脉气聚集的溪谷或者脉气流通的道路，当然没有血；如果你刺到深层的经脉，就会出血，而且可能是很危险的。而用元代之后的理论，现在谁都说不清楚。有的“理论家”甚至认为中医所说的气血都是无形的，因而出现在许多自己都不敢相信自己的诡辩和奇谈怪论。

（二）经络和血管是什么关系？

按照元代之前的经络理论，深层的经络就是血管。深层的经络气血循环的意义和现代的血液循环系统的意义，基本一致。由于历史的发展，现代对血液循环路线和血管结构的认识，比元代之前准确和细致得多，而且还解决了血液循环的动力问题，这是历史发展的必然。我们的祖先能在两千年前就认识到血液循环，他们是非常伟大的！但是，元代以后的经络学说没有明确地回答这个问题。

（三）经络是怎么被发现的？

元代之前的经络理论，对于深层经脉的发现，在《灵枢·经水》中已经作了清楚的回答，即通过对活体的观察和对尸体的解剖发现的。对浅层的俞穴，在《素问·气穴论》中也已经作了明确的回答，即通过针灸临床发现的。当然，我们还可以推论，通过针灸的效果和针刺时的循经感传，可以让我们体验到浅层经络的存在，也可以想象练气功时是否也会体验到经络的路线，作者缺乏这方面的体验，不敢妄加议论。

对于元代之后的医家为什么要改变原来的经络路线，作者没有发现确切的理由。因为这段时期，医家们对人體上具体的结构、代谢和功能的兴趣并不浓，他们所关心的是怎样用天地、阴阳、五行、气化、升降浮沉……来解释中医，规范中医，使中医完全回归于“理”之中。作者没有深厚的理学底蕴，自然也难以悟出滑伯仁等先辈改变古典经络路线的真实意图所在。

（四）浅层经络是一个伟大的发现，必须深入研究，造福人类

元代以前古籍中描述的人体浅层脉气流通的路线，是现代生物学所未发现的内容。这些内容，几千年来被针灸学家应用于临床，不但拯救了许多生命，减轻了许多病人的痛苦，而且一而再，再而三地证明了这条路线的存在。这很可能是我们中医将为世界医学做出的贡献之一。

我们今天应当用现代科学对它进行深入研究，首先要证明它确实客观存在。接下来要搞清它的结构是什么？里面流动着什么？对人体各个系统怎样发生影响？有什么影响？除用作针灸之外，还能开发出什么功能为人类社会服务？

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现代经络研究验证了人体浅层经络的存在

吴敦序，张煜

用现代方法对经络学说进行研究，始于二十世纪五十年代，至今已有六十多年，当中曾经出现过两次高潮。至今最大的成就，就是证明在人体表面浅层结构中，确实有经络存在。对这些成果的具体情况，以及这些成果对中医发展的意义，讨论如下。

一．俞穴存在于人体结构间隙空间

谢浩然在1988年对414个穴位解剖观察发现[1]，经穴主要分布于肌肉之间，肌腱之间，凹陷之中，缝隙之内等组织间隙中。邵金水[2]、余安胜、严振国[3]等在穴位内没有找到除了神经、血管、淋巴、肌肉、肌腱、筋膜等组织之外的未知结构，因而认为穴位是由已知的多种组织构筑而成的多层次立体空间。

尉迟静[4]、都兴菊[5]、党瑞山[6]、陈尔瑜[7]和费伦[8]等认为结缔组织和经络有密切的关系。他们发现穴位是在人体的结构间隙内，以结缔组织为基础，连同其中的小血管、神经丛、淋巴管等多种成分交织而成的。郑利岩[9]和原林[10]等则强调针灸治疗的物质基础是全身的筋膜结缔组织。

二．循经感传从感觉上证明了体表经络的客观存在

循经感传是指刺激某一个穴位时，出现酸、麻、重、胀的感觉，而且这种感觉会循着经络向远处传播的现象。如果刺激某一个穴位，立即出现这种现象，称为显性感传阳性；如果第一次

刺激不出现感传,当用电刺激井穴等激发手段之后,再次刺激才出现感传者,称为隐性感传阳性;如果用激发手段之后,刺激穴位仍不出现感传者,称为感传阴性。

对于循经感传的出现率国内进行过广泛的调查。现在仅举一例,即可见一斑。胡永海等[11]在1989年对334例病人进行调查,结果显性感传阳性者5例,占1.5%;隐性感传阳性者311例,占93.11%;感传阴性者18例,占5.39%。这一比例,和70年代以来全国数万例的调查结果,基本一致。

在调查中还发现,感传阳性者,中老年人多于年轻人,病人多与健康人。在同一个人身上,手经多于足经。肖永俭[12]曾在1989年报道对182例尼日利亚人进行的循经感传调查,结果阳性率为55.49%,显著者达10.44%,因此肖氏认为黑人循经感传显性者,似乎高于华人。

刘维洲[13]1993年报告,对显性和隐性循经感传者,调查10年后再次复查的结果。其中对100例显性者复查,只有80例参加。其中稳定者33人(41.25%),减退者22人(27.50%),消失者25人(31.25%)。对1652名隐性者复查,转为显性者3人(1.81/1000),转为较显著者44人(26.63/1000)。证明循经感传是有变动的,但相对稳定。

由于循经感传容易被察觉,对于医生和病人都是如此。所以张柳青[14]提出经络学说起源于循经感传,而主要源于临床医生的经验和气功锻炼者的体验。

三. 经络是人体表面的低电阻线

1950年日本中谷义雄[15]在测定肾病病人皮肤导电状况时,发现体表皮肤上存在低电阻线,即将其命名为“良导络”;还发现电阻明显低的点,命名为“良导点”;并设计制造出专门测定良导络的“良导络测定仪”,现在已经被广泛使用于临床。后来发现良导络有14条,其循行路线与中医古典的十四经脉相一致;良导点则与经络上的俞穴相一致。中谷氏在每条良导络上发现了一个“代表点”,基本上是该条经脉的原穴,可用以测定这条良导络的兴奋性;还在每条良导络上找出“兴奋点”和“抑制点”用于治疗,调节良导络的兴奋性。在日本500张床以上的医院中,80%已经使用这种疗法。

扬威生[16]用四个电极的方法清楚地测定出低电阻路线,发现与传统经络路线高度一致。经过认真推断,认为是良导络是皮下疏松结缔组织中富含组织液的区域。程绍鲁[17]等还测定了经穴中皮肤电阻抗振荡波动的现象。

祝总骧等[18]1988年对7例截肢者下肢的脾经和胃经上的低电阻线,2例健康人上肢心包经的低电阻线进行组织学研究和电阻测定。发现非低电阻线上的表皮角质层厚度为20—25微米,低电阻线上角质层厚度仅为5—15微米;其宽度一般为70微米,极少达到0.5毫米。这些组织离体之后,仍然保持比周围组织电阻低的特征。祝氏认为经络线上的表皮角质层变薄是经络线上低电阻的根本原因。

日本仓林氏[19]在动物实验时,曾发现狗、猫、兔、鼠的良导点处表皮比较薄,因而呈凹陷状,与祝总骧等的实验结果相近。

四. 经络线上传热快,温度高

1970年法国Borsarello [20]报道,通过红外热像图发现,面部的等温线和中医传统的经络路线一致。

胡翔龙等[21]2002年报道,在研究经络和体表红外线辐射轨迹的关系时,发现人体表面的经络线与红外线辐射轨迹互相重叠,证明人体经络路线和体表红外线辐射轨迹相一致。进一步研究发现,在这些线路上温度较高,氧分压较高,代谢活跃,微循环灌注增多,这可能和这条线路下的组织结构特殊有关。

许金森等[22]2005年报道,当对肺经、心包经、心经、胆经和非经络线部位进行点状和围绕手腕的弧形加热,并摄下红外辐射轨迹后。发现经线上的点加热后,热沿经线向两端呈线性快速扩散;非经线上的点加热后,向周围呈同心圆状缓慢扩散。扩散速度差异明显。因此许氏认为,经络线上的组织结构和其周围组织结构不同,所以导热的速度明显快于非经线部位。

王淑友等[23]2007年对家兔俞穴的高温和低电阻的关系进行了研究,发现高温和低电阻之间,存在明显正相关。

五. 同位素循经络向心流动

高友恭等[24]于1992年报道,他们用99M锝—高锝酸钠注入内关、间使、三阴交,发现锝呈向心流动,上肢流速31.2厘米/分,下肢流速4.6厘米/分。流动路线与经络一致,可一直流向胸腹部,重复性好。同时对豚鼠关元俞注射,可一直流向头部。高氏还发现,其流动可因加压而被阻断,放开后又恢复流动。

把锝注射在非经络部位,则不出现向心流动,只在注射点周围扩散。

周迪湘等[25]于1995年用医用的放射性活度为MBq级的 $\text{Na}^{232}\text{H}_3\text{PO}_4$ 水溶液0.5毫升,注射入腕部手三阴经的穴位内,再用X光片包裹上肢,以观察 ^{32}P 是否沿腕部循手三阴经流动,出现放射自显影的情况。受试者30例(男20例,女10例)中在前臂出现线状显影者26例。显影宽度为3—5毫米,长度为5—20厘米。心经显影者20例;心包经16例;肺经7例。

周迪湘等[26]又于1997年报道,用同位素 ^{32}P 注射入腕部手三阳经的穴位内,用X光片包住上肢,观察其在0—24和0—48小时的放射自显影情况。被观察的30例(男24例,女6例)中显影者27例,显影宽度为3—25毫米,长度为5—20厘米。其中小肠经显影者22例;三焦经显影者11例;大肠经显影者7例。

这两项实验证明, ^{32}P 注入手六经的腕部穴位后,都循着所属经络向心流动。

周迪湘等[27]于1993—1999年间还对220例(男159例,女61例)用 ^{32}P 同位素注射于内关、阳谷、太溪和昆仑,以X光片包裹上肢或下肢24小时,以观察 ^{32}P 循四肢经脉流动的情况。结果发现有点状,线状或点线状显影者176例,与传统经络路线一致,其直径为8—12毫米。

由于 ^{32}P 射线的穿透力为4毫米左右,X光片能显影,所以周氏认为 ^{32}P 是在皮肤表层或皮下2—3毫米处流动的。

六. 经络和神经系统关系密切

开始研究经络时,首先使用的就是有关神经解剖学和神经生理学的方法。

20世纪50年代,上海第一医学院[28]通过解剖发现,在经络内穴位区的神经分布多于非穴位区。

在研究经络现象如循经感传过程中,有人强调中枢神经。如蒋大宗[29]认为:经络实质是存在于中枢神经系统,经络路线实际上是在大脑皮层或白质中的强联系网络在躯体上的映像。

也有人重视周围神经的作用,他们强调经络现象的出现是刺激神经末梢,通过传入神经,到脊髓或脊髓以上的中枢神经结构,再由传出神经,到效应器,这个反射弧来完成的。这里面包括谢益宽[30]的“脊髓运动神经元柱论”、胡翔龙[31]的“外周动因激发论”、林文柱[32]的“脊髓脑干神经网络链论”等等,他们用这些假说来解释循经感传等经络现象。

许多学者都十分重视植物神经和经络的关系。中谷义雄[33]就认为良导络的兴奋性主要取决于交感神经的兴奋性。

刘里远[34]在2003年报道用放射自显影方法显示大鼠皮肤存在纵贯全身的交感物质分布线,左右对称,肢端如环。因而刘氏认为皮肤里存在丰富的植物神经网是针灸信号传递的主体,其中交感递质起着非常重要的作用。

七. 经络和体液循环关系密切

潘朝宠等[35]1992年报道,他们用免疫组化方法显示人和鼠的经络路线上有P物质、神经肽Y和血管活性肠肽能神经分布。这三种物质,穿行于经络路线的深浅各部之间,与经络的功能关系密切。

许多学者报道[36]、[37],在俞穴部位的结缔组织中富含钙和钾、钠、磷、铁、锌、锰等离子,而且针刺后有沿经络线重新分布的趋势[38]。

翟娜等[39]1988年报道,在俞穴的组织中肥大细胞数明显高于非穴位组织。

八. 讨论

经络学说产生至今,至少已经有两千多年的历史。在这漫长的历史过程中,中医界对经络的认识以元代分为分界线,元代以前和元代之后,显然不同。

元代之前的经典医书中,都把人体的经络分为两大部分。

一部分是人体深部的气血循环系统,保证把中焦受气取汁变化而赤的血液送往全身,保障生命活动的进行,使肝受血而能视,指受血而能摄。其气血运行途径即《灵枢·经脉》中描述的路线,这种经脉路线是有形的管道,皆伏行于分肉之间,深不可见。在《灵枢·经脉》、《灵枢·痼疽》、《素问·五脏生成篇》、《灵枢·脉度》、《灵枢·经水》和《灵枢·五十营》、《针灸甲乙经·十二经脉络脉支别第一》等对这部分循环都有详细的记载。

另一部分是人体浅层的经络,它们是由深层的十二经脉各自发出的经脉之气所形成的。这些脉气到达全身各处比较浅表的缝隙部位,即分肉之间,溪谷之内。这些部位因接受了脉气而成为俞穴,故称“气穴”。气穴在临床上,主要作针灸治疗之用,即

《素问·气穴论》所说的“针之所由行也”。十二经脉各气穴中的脉气,各自从四肢末端出发,循着本经的气穴,按井、荣、输、(原)、经、合的次序,向心流动,直到躯干,而后进入所属的脏腑,再汇入到各自的深层经脉之中。这种经脉之气是无形的,从一个穴位流到下一个穴位,穿行于皮肉之间,这条道路也是无形的。在《素问·气穴论》、《素问·气府论》、《灵枢·本输》和《针灸甲乙经·卷三》、《备急千金要方·卷八十七》和《铜人针灸经》都有清楚的记载。

元代之后,从《十四经发挥》到《针灸大成》、《医宗金鉴》直到现在的《针灸学》教材,都重点介绍《灵枢·经脉》的气血循环,并把人体上所有的俞穴直接串在气血循环的经脉上。这样一来,深层和浅层的经络被合二为一,一套经络既是气血循环的通道,也是针灸俞穴,进行治疗之所在。方便记忆,但是,有许多问题难以理解,因而形成当今对古典经络概念认识的紊乱。

元代前后对经络路线的不同认识,孰是孰非,需要经过对事实的调查研究,才能辨明。好在我们现在已经具备了这种条件。下面我们将就现代研究的成果,结合古代的经络理论,综合加以讨论。

(一) 解剖显示,俞穴存在于溪谷之中

现代学者对俞穴进行的形态学研究证明,俞穴存在于肌肉之间,肌腱之间,人体各种结构的缝隙之中,是由多种组织构筑的立体空间。在这空间里,以结缔组织为基础,还包含小血管、神经末梢、淋巴管等共同组成。他的位置表浅,一般没有大血管或神经主干通过。

这与《素问·气穴论》所描述的状况基本一致,即气穴在溪谷之内,只有孙络与之相会,和经脉并不在一起。这完全符合现在的针灸实践,也明显地支持元代以前对气穴的认识。

(二) 循经感传,从感觉上显示体表经络的存在

20世纪70年代国内对循经感传进行了大规模调查,发现显性感传者不多,但是加上隐性感传者,其数量高达90%以上,说明循经感传是人体的普遍现象。循经感传的路线是稳定的,从感传者的感觉,可以显示人体表面经络的存在。

针灸医生和病人都很容易体验到这种感传路线的存在,因而认为循经感传是人类认识经络的途径之一,是符合认识规律的。

(三) 体表经络线电阻低、导热快、温度高,客观地证明浅层经络的存在

20世纪50年代发现体表经络线上电阻较低,继而发现它传热较快,温度偏高,而且低电阻和高温度呈正相关。用仪器在经络线上测定,重复性很好。这不但从客观上验证了体表经络线的存在,而且为进一步研究这条线的结构、代谢和功能,提供了很好的线索。

(四) 同位素循经流动,显示了浅表经络向心流动的方向

用同位素锶和磷,以放射自显影的方法,发现在穴位上注射同位素后,它会沿着所属经络向心流动,可以直达躯干。这清楚地证明经络是可以流通物质的通道,而且显示在自然状况下,流动的方向是从四肢末端向躯干流动的。这与元代以前主张的经络

脉气流动方向一致,而与元代之后所主张的部分经络的气血流向相反。

纵观现代对经络研究的结果,无论通过被测试者的感觉,还是通过测试的仪器,都确切地显示出体表经络的存在。这条经络路线用肉眼看不见,里面流动的东西也是无形的,只有通过特殊的仪器才能显示出它的存在和它向心流动的方向。这些都强有力地支持元代以前的医家们对人体表层经络的认识。

作者[40]认为人体深层的经络系统,实质上就是中国古代的人体血液循环系统。现代的心血管系统与之相比,不但对血液循环途径的认识更加细致而准确,而且还解决了血液流行的动力问题,这是历史发展的必然,无需再多作讨论。

对于人体表层的经络系统,这是现代生物学还没有认识到的领域,也正是我们中医可以做出贡献的地方。六十年的研究证明了人体表层经络的确存在,但是,它是怎样的结构?里面流动着什么?它和人体其它系统有什么联系?除了用于针灸之外,还应该怎样开发它,使之对人体健康乃至人类社会做出贡献?这些都是我们需要思考和研究的问题。

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“一分为三”看“经络”

王以胜

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摘要：“经络学说”是中医理论重要组成部分，《黄帝内经·灵枢经》81篇主要是讨论“经络”和针灸，故又名《针经》。本文用“一分为三看世界”方法论探讨“经络”理论，提出“奇经六脉”和“经属”新概念，作为引玉之砖。

关键词：一分为三，灵枢经，经络，奇经六脉，经属，河车搬运，中黄，六经辨证。

一. 总论

按照“三元论”哲学思想来看中医学的“经络学说”，也是“一分为三”看“经络”。

“经络学说”是研究人体经络系统的“生理功能、病理变化、及其与脏腑相互关系”的学说；是说明人体“运行气血、传导反应、调节阴阳”的经络系统的理论；是中医理论体系的重要组成部分。

故《黄帝内经·灵枢经》“经脉第十”开篇就说“黄帝曰：经脉者，所以能决死生、处百病、调虚实，不可不通。”以胜理解这句话的含义就是黄帝已经告诉我们，要“一分为三看经脉”，经脉能：“决死生、处百病、调虚实”。

“经络”一分为三：“经络”由“经脉”、“络脉”、“经属”（此为作者新拟之名称）三部分组成，各自又“一分为三”：

“经脉”分为“十二正经”、“任督二脉”、“奇经六脉”。

“络脉”分为“别络、浮络、孙络”。

“经属”分为：“十二经别”、“十二经筋”、“十二皮部”。

（一）经脉：分“十二正经”、“任督二脉”、“奇经六脉”

1. “十二正经”：即“手三阴经、足三阴经；手三阳经、足三阳经”，合称“十二经脉”，又叫“十二正经”。这“十二经脉”都有起止循行线路和相应的穴位，而且与“五脏六腑”相对应，是经络系统的主体，堂堂正正，故名“十二正经”。具体命名如下：手太阴肺经、足太阴脾经；手厥阴心包经、足厥阴肝经；手少阴心经、足少阴肾经。手阳明大肠经、足阳明胃经；手少阳三焦经、足少阳胆经；手太阳小肠经、足太阳膀胱经。

2. “任督二脉”：“督脉”行于脊背正中线，“总督一身之阳”，因为手足三阳经都在督脉的大椎穴交会，故称督脉为“阳脉之海”。任脉行于胸腹正中线，足三阴经在任脉的中极、关元穴处交会，故称任脉为“阴脉之海”。

3. “奇经六脉”：指“冲脉、带脉、阳跷脉、阴跷脉、阴维脉、阳维脉”六脉而言。传统文献把“督脉、任脉”归于“奇经”，而称为“奇经八脉”。但是，“督脉、任脉”都有自己的“穴位”和“络脉”，而其余“奇经六脉”则无自己的穴位，更别说“络脉”了。显然“任督二脉”与“奇经六

脉”有明显区别，不可混为一谈。而且元朝滑伯仁先生已经把“督脉、任脉”另列而与“十二正经”相提并论，著有《十四经发挥》（1341年）一书。以胜主编的《针灸推拿学》于1995年出版时，因为作为国家中医药学校教材使用，为避免学术异议，还是沿用传统文献说法，把“任督二脉”归入“奇经八脉”论述。实际上以胜是把“督脉、任脉”另列一类，以示与“奇经六脉”有区别，表明“经脉”也是“一分为三”：分为“十二正经”、“任督二脉”、“奇经六脉”。

因为只有“十二经脉”和“任督二脉”（合称“十四经脉”）才有自己本经脉的腧穴，所以“十四经脉”上的腧穴总称为“十四经穴”，其余的穴位统称为“经外奇穴”。

（二）“络脉”分“别络、浮络、孙络”

1. 别络：“别络”即“本经别走邻经”。或从阳经入于相表里的阴经，或从阴经入于相表里的阳经，其功能是加强互为表里阴阳两经在四肢的联系、循环传注与调节作用。十二经脉、任督二脉各有一支“别络”，另加“脾之大络”，合为“十五别络”，各有一“络穴”。

2. 浮络：络脉之浮行于浅表部位的称为“浮络”。

3. 孙络：络脉最细小的分支称为“孙络”。

（三）“经属”分“十二经别”、“十二经筋”、“十二皮部”

1. “十二经别”：是十二经脉别行分出的循行于人体深部的经脉干线，其作用为加强表里两经联系、通达某些正经未能行经的器官与形体部位以补正经之不足。

2. “十二经筋”：是十二经脉循行部位分布的筋肉系统的总称，行于体表，主要功能是联缀四肢百骸、维络周身，主司关节运动。

3. “十二皮部”：是十二经脉在体表皮肤部位的反应区。

由于“十二经别”、“十二经筋”、“十二皮部”基本上和十二经脉循行部位一致，所以它们都是按照十二经脉命名，都“附属”于经脉，故总称为“经属”。

二. 经脉命名、循行交接

人体经络系统有“十二经脉”，每一条经脉都属于不同的脏腑，经脉循行连属脏腑器官，除了在体内深部循行，还分

别循行到体表,形成网络,沟通脏腑、肌肉、气血、四肢百骸,就如《黄帝内经·灵枢经》“经脉第十”所说:“经脉者,所以能决死生、处百病、调虚实,不可不通。”

(一) 十二经脉命名

经脉循行在上肢的,因为与相应的“经脉交接”在“手部”而称为“手经”;同理,经脉循行在下肢的,因为与相应的“经脉交接”在“足部”而称为“足经”。

上、下肢体又有“内侧”与“外侧”之别,内侧属阴,为阴经分布区域;外侧属阳,为阳经分布区域。在上、下肢的内、外侧又“一分为三”分别有“前、中、后”三条经脉循行。

于是“十二经脉”命名也是“一分为三”,由三部分组成:一是手或足;二是阴或阳,并且阴阳再“一分为三”,分别给予“太阴、厥阴、少阴”以及“阳明、少阳、太阳”之名称;三是所属的脏或腑,构成“十二经脉名称”。

阴阳相对,三阴三阳表里相合。阴气最盛为太阴(---),其次为少阴(--),再次为厥阴(-);阳气最盛为阳明(+++),其次为太阳(++),再次为少阳(+).

依据脏为阴、腑为阳命名分类:脏有“心、肺、心包、肝、脾、肾”六阴经。腑有“小肠、大肠、三焦、胆、胃、膀胱”六阳经。

依据经脉分布交接于手足部位命名分类:属于胸部的“肺、心包、心”之经脉交接分布于手部,命名为“手三阴经”;属于腹部的“脾、肝、肾”之经脉交接分布于足部,命名为“足三阴经”。属于“六腑”的“六阳经”与“六脏”的“六阴经”是“表里对应”关系命名。故有“手三阳经”和“足三阳经”。于是有手足阴阳对应的“十二经脉”命名全称如下:

手太阴肺经 — 手阳明大肠经;
手少阴心经 — 手太阳小肠经;
手厥阴心包经 — 手少阳三焦经。
足太阴脾经 — 足阳明胃经;
足少阴肾经 — 足太阳膀胱经;
足厥阴肝经 — 足少阳胆经。

(二) 十二经脉循行和交接规律

手三阴经从胸走手,在手指端交手三阳经;
手三阳经从手走头,在头面部交足三阳经;
足三阳经从头走足,在足趾端交足三阴经;
足三阴经从足入腹,在胸腹部交手三阴经。

十二经脉如此循行交接,形成一个“阴阳相贯,如环无端”的循环通路,保证人体气血周而复始地运行周身,达到阴阳气血相对平衡状态,即“阴平阳秘,生命乃治”的健康状态。

(三) 十二经首末穴位及流注顺序

1、手太阴肺经起于中焦,首穴胸部“中府”,末穴大拇

指“少商”,从腕后“列缺”穴分支到食指端交手阳明大肠经。

2、手阳明大肠经起于食指挠侧端,首穴“商阳”,末穴鼻孔旁“迎香”交足阳明胃经。

3、足阳明胃经起于鼻孔旁,首穴“承泣”,末穴足二趾外端“厉兑”,从“冲阳”穴分支到拇指内侧端交足太阴脾经。

4、足太阴脾经起于拇指内侧端首穴“隐白”,末穴腋下“大包”;分支从胃直上注入心,交手少阴心经。

5、手少阴心经起于心,首穴“极泉”,末穴手小指挠侧端“少冲”,走小指尺侧端交手太阳小肠经。

6、手太阳小肠经起于小指尺侧端首穴“少泽”,末穴“听宫”;分支到目内眦“睛明”穴交足太阳膀胱经。

7、足太阳膀胱经起于目内眦首穴“睛明”,末穴足小趾外侧端“至阴”,交足少阴肾经。

8、足少阴肾经起于足小趾,首穴足底“涌泉”,末穴锁骨下“俞府”。分支注入胸中,交手厥阴心包经。

9、手厥阴心包经起于胸中,下络三焦。首穴“天池”,末穴中指端“中冲”。分支从劳宫穴分出到无名指尺侧端“关冲”交手少阳三焦经。

10、手少阳三焦经起于无名指尺侧端首穴“关冲”,末穴目外眦眉外端“丝竹空”,向下交足少阳胆经。

11、足少阳胆经起于目外眦首穴“瞳子髎”,末穴足四趾外侧端“足窍阴”,分支到足大趾外侧端交足厥阴肝经。

12、足厥阴肝经起于足大拇指从毛处,首穴“大敦”,末穴在乳头下二肋间“期门”。分支交手太阴肺经。

三. 经脉循行主病

按“一分为三”方法论,探讨有关“十二经脉”的“循行、分支、主要病症”如下:

(一) 手太阴肺经

1. 循行:起于中焦,下络大肠,还循胃口,过横膈,属肺,至喉部,横行至胸外上方(中府),出腋下,沿上肢内侧前缘下行,过肘,至腕入寸口,上鱼际,出拇指端(少商)。

2. 分支:从手腕后方(列缺)出,直行至食指挠侧端(商阳)。交于手阳明大肠经。

3. 主要病症:胸闷胀满,缺盆疼痛,喘咳,气逆,烦心,掌中热,中风小便数而欠,喘喝,挠臂痛,咽喉肿痛,肩背痛等。

(二) 手阳明大肠经

1. 循行:起于食指挠侧端(商阳),经手背行于上肢内侧前缘,上肩经七颈椎棘突(大椎),下入锁骨上窝(缺盆),进胸腔络肺,过横膈下行属大肠。

2. 分支:由锁骨上窝上行,经颈部至面颊,入下齿中,还出口角和上唇,左右交叉于人中,至对侧鼻旁(迎香),交于足阳明胃经。

3. 主要病症：下牙痛，咽喉肿痛，鼻衄，清涕，口干，目黄，颈肿，上肢伸侧前缘及肩部疼痛或运动障碍等。

（三）足阳明胃经：

1. 循行：起于鼻旁（迎香），挟鼻上行，相交于鼻根部，旁行入目内眦，与足太阳经脉相会，下行沿鼻外入上齿中，环口绕唇，下交承浆，分别沿下颌后下方，经大迎，过耳前，沿发际到前额。

2. 分支：从大迎前下至人迎，沿喉咙向下后行至大椎，折向前行，入缺盆，下膈属胃，络脾。其直行者：从缺盆出体表，沿乳中线下行，挟脐（旁开二寸），下行到气街穴（腹股沟处）。有一支从胃下口分出，经腹部深层，下行至气街穴，与直行者会合后下行大腿前侧，至膝髌，沿足胫外侧前缘下行至足背，入足第二趾外侧端（厉兑）。另一支从足三里穴起，下行入中趾外侧端。还有一支从足背上冲阳穴出，入足大趾内侧端（隐白），交于足太阴脾经。

3. 主要病症：高热汗出，鼻衄，唇疹，口渴，头痛，咽喉肿痛，颈肿，惊惕，发狂，脘腹胀满，肠鸣，腹水，腿前外侧、足背、第三趾疼痛或运动障碍。

（四）足太阴脾经：

1. 循行：起于足大趾内侧端（隐白），沿内侧上行过内踝前缘，沿小腿内侧正中线上行，在内踝上八寸处，交出足厥阴肝经之前，沿大腿内侧缘上行，经腹部腹哀穴入腹，属脾，络胃。

2. 分支：从腹哀穴处分出，向外上方行至腋，再至腋下大包穴，再折向上前方，经中府入里，上行挟咽，连舌本，散舌下。另一支从胃直上过横膈注入心中，交于手少阴心经。

3. 主要病症：舌本强，食则呕，善噫，黄疸，倦怠乏力，身体困重，食不下，脘腹胀痛，大便溏泻，下肢内侧肿痛或厥冷，足大趾运动障碍。

（五）手少阴心经：

1. 循行：起于心中，属心系，下膈，络小肠。

2. 分支：从心系分出，挟食道，上行连于目系。其直行者：从心系直行上肺，出腋下（极泉），沿上肢内侧后缘，过肘，经掌后锐骨，至小指内侧端（少冲），交于手太阳小肠经。

3. 主要病症：心痛，咽干口渴，胸胁痛，上肢曲侧后缘疼痛、厥冷，手心热，目黄等。

（六）手太阳小肠经：

1. 循行：起于小指外侧端（少泽），沿手背、上肢外侧后缘，过肘，上行绕肩胛，交肩上（大椎），前行入缺盆，络心，沿食道下膈至胃，下行属小肠。

2. 分支：从缺盆沿颈上颊，至目外眦，转入耳中（听宫）。另一支从颊分出，经眼眶下缘，至目内眦（睛明），交于足太阳膀胱经。

3. 主要病症：耳聋，目黄，咽痛，下颌及颈部肿痛，肩

臂及上肢伸侧后缘疼痛。

（七）足太阳膀胱经：

1. 循行：起于目内眦（睛明），经额上行于头顶（百会）。

2. 分支：从头顶分出，向两侧下行至耳上角。其直行者：从头顶分别向后至枕骨处，入颅络脑，复出分别下项（天柱），下会于大椎，再分左右挟脊（1.5寸），抵腰（肾俞），络肾，属膀胱。有一支从腰分出，挟脊下行，过臀，从大腿后外缘下行至腘窝（委中）。另一支从后项分出，经肩胛内侧，从附分穴挟脊（3寸）下行，至委中与前分支会合，下至（承山），再至足外踝，沿足背至小趾外侧端（至阴），交于足少阴肾经。

3. 主要病症：头项强痛，目黄，癫狂，半身不遂，经脉循行部位疼痛和运动障碍等。

（八）足少阴肾经：

1. 循行：起于足小趾下，斜行于足心（涌泉），至内踝后（太溪），下入足跟，上沿小腿内侧后缘，至腘内侧，上股内侧后缘入脊内（长强）贯脊至腰，属肾，络膀胱。

2. 分支：从脊内分出，由会阴上经腹（正中线上旁开五分），走胸（正中线上旁开二寸），止于俞府穴。其直行者，从肾上贯肝，过膈，入肺，沿喉咙，挟舌根部。另一分支，从肺中分出，络心，注于胸中，交于手厥阴心包经。

3. 主要病症：气短喘促，咳嗽咯血，头昏目眩，心如悬若饥状，惊恐，口舌干燥，咽干肿痛，心胸烦闷疼痛，腹泻，腰脊疼痛，下肢无力、厥冷，足心发热，黄疸等。

（九）手厥阴心包经：

1. 循行：起于胸中，属心包，下行，依次络于上、中、下三焦。

2. 分支：从胸中分出，横行至腋下三寸处（天池），又上抵腋下，沿上肢内侧中线入肘，过腕，至掌中（劳宫），循中指出其端（中冲）。另一分支从掌中分出，沿无名指出其尺侧端（关冲），交于手少阳三焦经。

3. 主要病症：心悸，心烦，胸胁支满，心痛，精神失常，上肢痉挛，手心热，腋肿，面赤，目黄等。

（十）手少阳三焦经：

1. 循行：起于无名指尺侧端（关冲），向上沿无名指尺侧至手腕背面，经前臂外侧中线，过肘，上肩，向前行于缺盆，布膻中，散络心包，过膈膜，依次属于上、中、下三焦。

2. 分支：从膻中分出，上行出缺盆，至肩（大椎），上项，沿耳后（翳风），直上出耳上角，前行经额至目眶下。另一分支从耳后分出，进入耳中，出走耳前，至目外眦（瞳子髻），交于足少阳胆经。

3. 主要病症：耳聋，咽喉肿痛，颊部、耳后疼痛，肩部、前臂疼痛，小指、次指运动障碍，汗出等。

（十一）足少阳胆经：

1. 循行：起于目外眦（瞳子髻），过听会，上至头角（额厌），下耳后（完骨），折回上行，经头额至眉上（阳白），又向后折至风池穴，下行至肩（大椎），前行入缺盆。

2. 分支：从耳后分出，进入耳中，出于耳前，至目外眦后方。又一支从目外眦分出，下行至大迎，折行至目眶下，又折向后下方，过颊，下颈，与前脉合于缺盆，入里下行至胸中，贯膈，络肝，属胆，沿肋下内出气街，绕毛际横行至环跳穴处。其直行者，从缺盆下腋，沿胸侧过季肋，下行至环跳穴处与前脉会合，再下行，沿下肢外侧中线，过股、膝、胫至外踝之前，沿足背行出于第四趾外侧端（窍阴）。另一分支从足背（临泣）分出，前行出于大趾爪甲后丛毛处，交于足厥阴肝经。

3. 主要病症：往来寒热，口苦，善太息，胁痛，偏头痛，瘰癧，疟疾，股、膝、胫至外踝等处疼痛及运动障碍等。

（十二）足厥阴肝经：

1. 循行：起于足大趾爪甲后丛毛处，下至大趾外侧端（大敦），向上沿足背内踝前沿上行，至内踝上八寸处交出足太阴脾经之后，上行过膝，沿股内侧中线进入阴毛中，绕阴器，

至小腹，向外上方行至十一肋端入腹，挟胃，属肝，络胆，上贯膈，分布于胁肋，沿喉咙，进入鼻之内窍，上行连目系，出于额，上行与督脉会于头顶部。

2. 分支：从目系分出下行于颊里，环绕口唇。另一分支从肝分出，上贯膈，注肺中，交于手太阴肺经。

3. 主要病症：胸满，胁肋胀痛，呕吐，腹泻，疝气，尿闭，腰痛，妇女少腹痛。

《黄帝内经·灵枢》“经脉第十”有关肝经的原文是：“肝足厥阴之脉起于大趾丛毛之际---其支者复从肝别贯膈上注肺是动则病腰痛不可以俯仰丈夫疝妇人少腹肿甚则咽干面尘脱色是肝所生病者胸满呕逆飧泄狐疝遗溺闭癰为此诸病盛则泻之虚则补之热者疾之寒则留之陷下则灸之不盛不虚以经取之”，提出“是动则病”和“所生病者”以及治疗原则。

（本文分两部分刊出，第二部分请看下期）

（版面所限，参考文献略）

无形之痰与衰老探讨

薛秋龙

摘要：现今无论是在中国还是国外，高血脂，高胆固醇，高血压（简称“三高”证）和肥胖等疾病是危害我们身体健康的重要因素。国内研究人员对血脂与中医“无形之痰”的关系做了广泛研究，论证了血脂即是血中之“痰”，亦即“无形之痰”。本文对这些研究作简要综述，并对“无形之痰”对人体衰老的影响进行探讨。希望对养生与治病有所启迪。

概述

关于人体衰老的现代研究，已经非常的深入了，已经到了细胞水平和分子水平的研究了。中医自古至今也对探讨人体衰老方面做了很多工作，在养生方面更是积累了不少经验，文字资料浩如烟海，中医经典著作《黄帝内经》首先就是一部养生延年和防病的著作。过去的研究在理论上主要是瞄准脏腑气血的亏虚和精神失衡，治疗上主要是调补气血，特别是对先天之本和后天之本的固护和对精神情志的调理。

现代很多中医研究人员将研究方向瞄向了痰，特别是无形之痰的研究。对它的实质和特性做了深入的探索。还将痰作为一门专门的学科提了出来，河北朱增柏著有《中医痰病学说》，对痰有详细的论述。下面只是我对无形之痰与养生做一些简单的探讨。

一．无形之痰的概念

痰作为一种病理产物和致病因素，它不仅仅是咳出来看得见的有形之痰，也包括带有痰性特征的病症在内，而引起这些病症的因素被称为无形之痰。无形之痰的成因比较复杂，巢元方认为痰因血脉闭塞或饮水积聚而生（隋·巢元方）。痰的产生跟脾肾肺有很大的关系，脾为生痰之源，肺为储痰之器，肾为生痰之本，这些已是我们所熟知的。脾虚不能运化精微物质和水湿，势必造成这些物质的滞留而成痰；肾虚而不能温化水液，积而成痰。现代因研究方法的进步，对痰的研究不断地深入和扩展。宋剑南（宋剑南，1995）等采用药物反证法发现胆固醇、甘油三酸酯及低密度脂蛋白的升高是痰浊的主要特征和生化物质基础。因此认为“高血脂为血中之痰浊”即无形之痰，痰浊留滞血脉之中是引起高血脂症的重要因素。

二．痰浊致衰老的历史认识与现代研究

无形之痰一旦形成，它对人体造成的负面作用是复杂的和多维度的。除了引起临床疾病外，另外就是导致衰老，而这是个缓慢的和隐性的过程。痰对身体衰老的影响主要表现在血循环方面。痰性粘着，容易对血液的循环造成阻碍，引起血瘀，痰是血循环流通不顺的主要成因。元代朱丹溪（元·朱丹溪）提出了“痰挟血瘀”的观点。清朝唐容川也认为痰水之壅，由于瘀血使然，但去瘀血，则痰水自消（清·唐容川）。现代王琦和叶加农（1995）对痰湿体质人和非痰湿体质人进行血流变和甲皱微循环观察，发现痰湿者血流态异常和微循环障碍。孙健芝等（1996）对120例痰证患者和50例非痰证患者的血流变观察发现痰证患者的全血粘度、红细胞压积和血浆粘度均增高，提示患者处于高粘、高凝和血瘀的状态。痰浊是机体脏腑失调的病理产物，高血脂症之邪实多痰瘀同病。俞亚琴和郭兮华（1995）从血液流变学探讨高血脂症的痰浊改变，发现痰浊组的血瘀证阳性率明显高于非痰浊组，全血比粘度、全血还原粘度、纤维蛋白原及红细胞电泳明显高于非痰浊组。进一步验证了痰凝必致血瘀的理论，也表明痰凝血瘀是高血脂造成动脉粥样硬化及其它合并症的主要因素。

无形之痰的堆积阻碍了血液对机体濡养的同时，必会造成机体内部能量的失调或过耗，加速机体的衰老。左光明和谭斌（2010）在对一组小鼠进行人造高脂研究时发现，高脂模型组小鼠在血脂升高的同时，血清和肝脏中的抗氧化酶（SOD）活性显著下降（ $P < 0.05$ ）。在饲喂不同组，不同剂量的苦荞蛋白后，血清和肝脏中SOD活性有上升的趋势，与高脂模型组相比，血清蛋白高、低剂量组和球蛋白高剂量组小鼠血清和肝脏中SOD上升显著（ $P < 0.05$ ），除此之外，复合蛋白高、低剂量组在肝脏中的SOD上升也与高脂模型组达到统计学意义上的显著差异。抗氧化酶是抗衰老的重要物质，由此可见血脂的身高会加快人体衰老。

三. 无形之痰对衰老的影响至为重要

无形之痰对人体血供，气机及神明的破坏是非常直接和强力的，所以对无形之痰的防治非常重要。人的衰老，不仅仅是外表衰老体征的显现，它还体现在机体器官功能的异常和减退。维持器官功能的正常或者是越接近正常越好，就需要有良好的血供。

英国电视第四频道（Channel4）曾经播放过几集医学解剖实验节目，节目里解剖师对几具60岁以上死者的遗体血管进行解剖，发现死者的大小血管的内壁均有不同程度受损和脂肪沉着，而这些死者的病历记录均没有心血管病史。内痰对血循环系统的侵害造成脏腑营养不足，是脏腑机能衰退和百病丛生的关键原因。大多数人可能没有血管硬化和冠心病的困扰，但内痰一直在神不知鬼不觉的侵害着我们的健康，直到我们生命的最后一刻。元代医家王圭用祛痰法治疗各种

疑难怪病效果显著，并有《泰定养生主论》一书流传后世，现代中医师李己义积多年临症经验得出了“怪病从痰论治”的结论。

四. 养生抗衰要从年轻开始

根据人体生长发育的规律，采取养生措施应该从年轻时甚至是少年时就得开始了。阴为体，阳为用，人的一生，基本上就是阳消耗的过程。维护这个阳要从年轻时期就开始，而防痰保健同样要从年轻时就着手。根据黄碧桃的研究报告，动脉粥样硬化的早期病理变化从5岁儿童就出现了，在血管内壁出现“初期系脂肪痕”（Fatty streaks），根据尸体解剖显示，10%的儿童在10岁前，血管壁就出现脂肪痕。根据越战时对美国士兵尸体的解剖显示45%的年轻健康士兵有程度不一的动脉硬化（黄碧桃）。

由于现今儿童饮食多偏向高脂肪和高能量，肥胖和缺乏运动等，痰浊型的肥胖儿童、青少年显著增加，这是值得我们关注的问题，早作预防，才不至于年纪一把以后才发现全身上下黄钟尽毁，山河破碎。

五. 消除无形之痰的几个常用药物

经过药理研究和临床实践发现，山楂，决明子和荷叶是几个消除无形之痰比较好的中药。

李贵海等（2002）研究证明山楂有显著的降血脂和抗氧化的作用，对高血脂小鼠经用山楂后，血脂和总胆固醇均下降，血清抗氧化酶比对照组明显增高。实验观察说明山楂可以明显降低高血脂时超氧自由基对血管内皮的损伤。

据《山东中医药杂志》1995年第1期登载，浙江医科大学心血管生化研究室应用高胆固醇血症动物模型，研究证明决明子对高胆固醇血症所致的动脉粥样硬化有抑制作用。决明子有润肠的作用，通过导泻，能促进粪便中胆固醇的排出，表明其降胆固醇与缓泻作用有关。此作用又通过反馈调节LDL的代谢，从而降低血清胆固醇水平，延缓、抑制动脉粥样硬化斑块的形成。

国内对荷叶治疗“三高”症有很多的研究。许腊英等（1996）用荷叶对模拟高脂小鼠试验证明荷叶有降脂的作用。研究除了发现荷叶的降脂功能外，还证实它具有抗氧化和抗衰老的功效，荷叶提取的生物碱能清除人体的对羟基自由基和超氧阴离子自由基（王福冈等，2010）。

以上三味药，资源丰富，价格低廉，一直都是中医临床常用药材。在传统临床上山楂用以消食活血；决明子清肝明目和通便；荷叶清热、止血和祛瘀。我觉得它们在降脂抗衰，预防心血管疾病方面是大有可为的。

六. 结尾

以上浅谈了痰对血循环的负面影响和三味消痰药，当然消除无形痰的药远非三味那么少。下面想引用先贤对血的认识作为结尾。

全身四肢百骸，五脏六腑皆受血之濡养。中医先贤对血有独特的理解，《灵枢·决气》：“中焦受气取汁，变化而赤，是谓血。”《灵枢·营卫生会》：“以奉生身，其贵于此，故独得行于经隧。”《难经·二十二难》：“血主濡之。”《素问·五脏生成篇》：“肝受血而能视，足受血而能步，掌受血而能握，指受血而能摄。”《景岳全书·脏象别论》：“血者水谷之精也，生于脾，总流于心，藏受于肝，宣布于肺，施泄于肾，而灌溉一身。”由此可知血对身体起到了濡养的作用，并且维持各个器官和全身肌肉组织的生理功能，如果血虚或血瘀了，那么它的濡养作用就会大打折扣。失去血液濡养的全身组织，其功能则会失其常态。维持血液的流通无碍，以灌溉组织的每一个角落是渴望健康的人要做的功课，而防痰消痰则是非常重要的一步。

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论胆胃同病

张超 (Manchester)

临床上常见到胆胃同病，胃脘疼痛，胀满不适（胃，十二指肠慢性炎症，溃疡等），兼有胁痛（胆囊炎，胆石症等）。故其症治方面具有一定的特点，根据本人的临床点滴体会，简述其要，共同研讨，以期提高临床疗效。

1. 病因同中有异，虚实各有侧重

胆附于肝，为中清之腑，同主疏泄。胃主受纳，磨化，腐熟水谷，以降为和，胆随胃降，故胆与胃的生理功能密切相关。诸凡饮食不节，情志不畅等病因，均可导致胆与胃之疾病。如经常酒食不节，奢食肥甘煎炸之品，助湿生热，既伤于胃，尤其损及肝胆，使肝胆湿热逐渐滋长，疏泄失常，胆中清汁变浊。若湿热久蕴，热重于湿，可成结石。一旦结石形成，胆汁下泄不畅，疏泄功能更受影响。如病因继续起作用，则互为助长，互相影响，胆腑之疾必然日益加重，胃病亦常相应滋长。

至于情志因素，如经常抑郁愤怒，肝胆之气失于疏泄，木郁不能疏土，往往肝胆先病，继及于胃。其它劳逸太过，经常烦劳，常可影响胃腑功能，因劳累而进食增加，饭后活动过早，影响消运，脾气易伤。胃既有病，中土虚弱，肝气乘侮，胆降失常，亦可导致胆胃同病，然常以胃病在先，胆

病继后。综上所述，胆胃同病有先后、轻重，病因同中有异，虽同又先后之别，虽异而又相互联系。

胆病与胃病，均有气滞的病理基础。腑宜通，气机宜宣畅，是其基本生理要求，肝胆气滞，疏泄不及，胃中气滞，升降失司，于是导致脘胁疼痛，痞胀，食欲不振等症。疼痛的程度常与气滞的轻重有关。胆病气滞常兼湿热，湿热不祛，气滞愈甚。气病及血，导致血瘀。故胆病一般以实证为主。至于与胆相关的心、肝、脾诸脏若有兼病的，各脏有虚症者，则表现有虚实夹杂之证。

胃病除气滞这一基础病理外，实证有寒邪、湿阻、热郁、血瘀、食滞；虚证有气虚（脾胃气虚）、胃阴不足或气阴两虚之证。胆胃同病之际，或呈谓实，或呈谓虚，但病久者每多虚实相兼。惟其发作时以实为主，平时以虚为本，以实为标，其间亦常因人因时而各有侧重。

2. 查明明确病位，分清轻重缓急

胆胃同病的主症是上腹部胀、痛。其特点是：部位在上腹心窝、上脘、及于右肋下，自觉痛与腹部触痛，压痛基本相应，有的引及右背及肩部。疼痛性质一般为隐痛、胀痛。发作明显时出现剧痛、绞痛，有时改变体位可使症状减轻。疼痛一般无规律性，有时表现为空腹时痛，进食适量后可缓

解片刻，但很快又痛；或入睡后疼痛；或黎明时痛作，早餐后痛可减轻。疼痛的发作或加重，常与饮食不当、情志不畅、劳累等因素有关。胆胃兼病时，一般常有暖气多，得暖则舒，食欲差，脉象弦或弦细等症。

胆病湿热互阻，肝胆失疏，胆液不循常道之时，可以出现目黄，溲黄，皮肤色黄。湿热充斥，营卫不和，可见寒热发作。出现上述诸症，说明胆病重。若伴有腕痛持续数日，突然缓解而大便色黑如漆，乃有气滞而中焦脾胃气虚，气郁化热，损及阴络，或脾气虚不能摄血。由此可见，胆胃俱病者在病程中尚需细心诊查，注意病情转化。

3. 治疗体会

关于治疗问题，据我的体会，应重点提出以下几点：

1) 清化湿热，理气和降

胆病病理因素常有湿（热）。诸凡影响胆液（精汁）的生理形态及胆腑之功能，均可形成湿（热）。若再加饮食不注意，食滞内停，常会导致病情的发作或加重。去湿不尽，以致反复。胃与胆同属腑，腑宜通降，故和降之法亦为胆胃同病之主要治则。祛湿与和降应相辅运用。至于具体掌握和应用应注意以下几点：

胆病祛湿，与清热相合。因胆腑之湿多从热化，与热相搏，成为湿热病理因素。湿热相和，互相滋长，相互粘滞，可以成石。甚则瘀热不清，及于营卫，或成痈脓。

祛湿与清热相和，亦即清胆化湿，适用于胆病发作较重之时，苔腻不渴，黄疸，胁痛，小溲黄。药如茵陈，碧玉散，青蒿，黄芩，厚朴，炒苍术，薏苡仁，金钱草，海金沙，茯

苓，芦根等。待症状改善，还需运用一段时间，务求湿热尽除。若属热盛者，酌配黄连，银花，蒲公英，大黄等。

理气之品，能行气滞。胆胃宜降，有病则均为气滞。据本人经验，一般宜选用苏梗、枳壳、青皮、陈皮、广木香、佛手片、香附等微辛微温药以理气，配用白芍、甘草，一则酸柔和缓，致其辛温之味，以免耗气；二则疏挛定痛，可除脘胁之痛。此外，腑中有滞，理宜导之，有积宜消，有食滞宜化。大黄不仅能增加胆汁的分泌，又能使肝胰壶腹括约肌迟缓舒张，且能增进肠管蠕动及胆囊收缩，使胆道炎症，结石疾患的常用药。可根据病情掌握用量，煎剂后下，或另外用沸水泡服。也可研成碎末过筛，每次一克，可根据病情增减其量，每日1到2次，以腑气通畅为度。

至于胆病有少数湿从寒化，胃病脾胃气虚者，自当据证而治以温通或补益脾胃之法，佐以消滞，理气之品，内脏得以温养，气旺而腑行亦畅。胃阴不足者，用滋养胃阴，常可配用川朴花、佛手花、广郁金、绿萼梅等理气利胆，微辛不燥，不致耗阴之品。若肝病及胆，肝阴不足，酌配枸杞子、生地、丹参、当归、川楝子等，寓一贯煎之意而更胜一筹。为了不致碍湿，又能泄降阴虚所生之热，芦根、茵陈、金钱草、薏苡仁、蒲公英之类，亦可据证参用。

2) 纠正胆汁返流，调其升降功能

慢性胆囊炎、胆石症，由于胆道功能障碍，伴有胆汁返流入胃者甚为多见，甚至从胃又可返流至食管，此乃引起慢性胃炎及食管炎之重要因素。通过多年临床经验，运用辩证施治结合降胆和胃方法，疗效较好，前述理气和降之法可以参考，配用旋复花、代赭石、怀牛膝等，颇有效验。有些顽固病例，在降逆药中加入桔梗，降中有升，以降为主，可以提高疗效。

(Continued from Page 55)

- 1) Relative certification for who conduct education and research as a bywork. Submit the copy of award certification if any.
- 2) Copy of front page of monographs, teaching materials or translations.
- 3) Applicants for chief physician assessment should submit other documents beside above:

One article on study, use or research for the TCM classics (one of 'Huang Di Nei Jing', 'Shang Han Lun', 'Jin Gui Yao Lue', 'Wen Bing Tiao Bian') (Chinese version is necessary). One article on academic development and prospect in relative disciplinary field (Chinese version is necessary).

6. Assessment result

- 1) Standard for Assessment
 - Experts evaluation that applicant has reached the declared level by assessing the provided thesis, effective therapy documents and research design or scientific gains.
 - After judging the experience of learning and usage

of classical theory of TCM, thesis about actuality and prospect of the subject and other thesis, experts decide whether the applicant reached the declared level.

- Experts confirm the applicant when the titles by passing the reply.
- 2) Applicant will achieve the declared title when they attained all three standards.

7. Issued the certification

- 1) Award the relevant certificate to those has come up to the standard and passes the Assessments.
- 2) The certificates are all notarized sector legalization.

8. Consulting

- 1) In UK: Professor Engin CAN
Tel: 078 461 934 88
- 2) In CHN: Qi Sun, Jinxiang Xu,
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中医药针灸为主救治急症昏迷的临床体会

袁炳胜

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摘要:昏迷,是可因多种病因或理化因素引起的一种脑功能衰竭表现,是以持续性意识完全丧失为特征最严重的意识障碍,中医称为“厥证”或“厥逆”。从2000多年前的《黄帝内经》、《伤寒杂病论》,到《清代名医医案精华》等大量医籍,均广为记载了中医关于厥证病因病机及中医药针灸诊治该病的内容。兹选取笔者诊治该病的3则医案为例,对针灸中医药治疗昏迷一症的理法和要点进行探讨,提出了急症诊治中应四诊合参,病证同辨;注意个体体质情况,邪正虚实,调理升降;强调阳气在生命活动中的主导作用;主张针灸与药物治疗结合、补泻轻重各得其宜;中医针灸治疗急症昏迷,有助于提高疗效、迅速缓解病情、防止或减少后遗症等观点。

关键词:昏迷,急症,中医治疗 / 针灸,中医药

1. 概述

昏迷是临床常见严重急症,中医临床治疗本病有着悠久的历史,对本病病因机理有着系统的认识和丰富的诊、治方法和经验。继承和学习这些理论、经验和方法,推陈出新,合理应用于现代临床,具有现实而重要的意义。兹以笔者临床验案三则为例,以为引玉之砖。

2. 临床案例

2.1 中风昏迷

徐某,男,65岁。

初诊:2002年4月29日晨8点50,因数分钟前被路人发现倒卧于道路旁,旋被送本院急救。旋即邀余会诊。查见:面目红赤,神志不清,呼吸息粗,口吐涎沫,牙关紧咬,四肢拘急,两手握固,肢端凉、双下肢微肿,唇色暗红,撬开齿缝可见舌边尖红绛,脉弦滑。血压:230/140mmHg,心率:100次/分钟。

诊断:中风(闭证)。肝风内动、痰热闭窍,气机逆乱、脏腑功能失调,经络瘀滞不通。

治则:醒脑豁痰开窍,平肝熄风,通腑泻热,救急为先。

针灸:时9:05(辰),取曲池(提插泻法)、人中(进针后透向鼻中隔下针1寸,捻转泻法)、内关(透间使)、三阴交、合谷、太冲、尺泽、复溜、照海、百会、涌泉、承浆、丰隆(依次针刺,针至丰隆,对针刺开始有反应,头动摇而手足不自主伸缩以避针)。此后每隔15分钟行针一次。第一轮行针时患者醒转,双目睁开,问话时已可有反应,但牙关尚紧,不能言语;第二次行针后,牙关渐松,手足渐软,口内涌吐出大量涎沫,而精神气色随之好转,口内可以发声,手足已有自主活动。此时(9:30)西医开始予甘露醇静脉滴注、利水平肌注(遵予建议给予左右曲池穴位注射),约9:40左右,神志及语言已完全恢复,再次施行手法后去针,嘱试活动四肢,已能抬举手臂下肢配合穿脱衣裤。

中药:

柴胡30克,酒川军12克,枳壳12克,黄芩30克,法半夏30克,赤芍30克,牡蛎50克,胆南星12克,连翘30,鲜竹沥100ml(兑服),大枣30克,水煎3次,分6次服,每日3次。

二诊(2002年4月30日):经昨日针灸后,神志即清醒,下午家人来院后,已与服中药三次,夜来得大便泻下臭秽2次,精神大为好转,今晨饮食已可得进,手足功能活动亦基本恢复,血压亦已降至166/92毫米汞柱,成功脱离危险。

体会:本例患者,中风突发,昏倒路旁。于其足肿,知心肾不足。盖肝阳独亢,夹风痰上壅,致脑窍闭塞,阴阳淆乱,气机郁闭、脏腑功能紊乱,经络失其通畅,致卒然仆倒,不省人事,口吐涎沫、牙关紧咬、四肢拘急,正是《内经》所谓“形气绝而血菀于上,使人薄厥”【1】之症。急者治其标,以启闭开郁(人中、内关、三阴交、合谷、太冲)、豁痰开窍(尺泽、承浆、涌泉、丰隆)、平肝熄风(太冲、复溜、三阴交)、通腑泄热(合谷、太冲、照海、丰隆),以复其升降,则阴阳气血渐和、脏腑功能渐复、经络渐通,而诸证渐次恢复矣。中药者,亦以清热涤痰、通腑泄热、清心开窍、调顺升降为治,以巩固疗效,防止复发。

2.2 昏迷伴经行腹痛

郑某,女,15岁,2006年9月28日4:30分诊。2小时前午休起后,突发昏倒,呼之不应。被老师同学送往本院内科救治。经查体温、血压、血常规、血糖等均正常范围;心电图:心率80次/分钟,窦性心律不齐;B超肝、胆、脾、胰、肾未见异常,子宫内膜增厚;经运用西药静脉滴注等并针刺人中穴,已救治3小时,仍无好转,依然昏迷不省人事,遂邀余会诊。查见颈软,对光反射良好,脉滑数兼弦,手指及足踝上下厥冷,牙关紧咬、呼之不应。

诊断:厥证。因于气血失和,扰动清空,脏腑经络失调,气机闭郁。

治则:宜活血理气、解郁开窍醒脑,佐以调中,治在心肝脾胃,取手足厥阴、足太阴阳明及督脉为治。

针灸：内关（提插捻转平补平泻法）、印堂（捻转平补平泻法）、百会（捻转泻法），针刺同时嘱其亲人呼唤其名。初不能应，随针三穴、施补泻而目开，随而呼之能应，三穴针毕时，已能回答医者提问。问其最近有无不适，答曰长期小腹痛，每于经行前则甚，今日因经行而疼痛特甚。复取足三里（提插补法）、三阴交（提插捻转结合平补平泻）、太冲（提插泻法）三穴，询其腹痛大除、精神渐佳。询知其经行小腹痛已三年余，左侧为甚，时作时止，近迁延已20余日。诊其舌质暗红、苔薄白。留针1小时，腹痛不再，感觉良好，遂起针，观察24小时，未再有不适而出院。

中药：逍遥散加丹参、蒲黄、五灵脂、山楂、香附、益母草煎服，善后调理。

体会：昏厥诸证，多见心脑血管之病，因于肝阳上亢、风阳夹痰，上扰清空，清窍闭塞；或因热病，热极生风，痰热闭窍。然而此例，于临证所见，无热、无痰、无风，是未可一见厥逆昏寐之症，便概行息风清热化痰开窍诸治。非风非痰非热，则或气血之郁闭也。适当青春年龄，脉象滑数兼弦，是经行欠畅，气血有郁滞之征。《清代名医医案精华·陈良夫医案·厥证》载“信事不行”伴“腹痛”而厥案【2】类此。

B超肝胆脾肾均正常，唯见子宫内层增厚，亦提示病位所在，气血有久久之郁，法宜乎通调是也。然病虽有所本，但急则先治其标，故首取内关、印堂、百会，以调心脑之机关。以心主神明，心主血脉，又以其故而为五脏六腑之大主也。印堂百会，为督脉穴，又位于脑，为通督醒脑、回阳救逆之要穴也。针罢三穴，三呼而能应，再呼而能答，得以知其久病腹痛、经行尤甚，遂益信病源所在，前此所患是也，故加取足三里、三阴交、太冲诸穴，疏肝健脾、活血理气，气血同调，补泻兼施，标本俱治。久痛大厥，初初醒转，大气方舒，原不宜多针强刺。善后以逍遥散加减之方，亦健脾疏肝，活血消瘀，正邪兼顾，以图根本之意。

2.3 农药中毒后持续昏迷痉厥

2004年夏，应邀会诊一例大剂农药中毒患者，因居住偏僻山区，经长途辗转运送来院时，呼吸暂停已40分钟，经抢救而心肺功能复舒后，仍持续高热不退，伴汗出神昏，两手及下肢拘挛，时时抽搐，大便燥秘，中西医救治盈月而诸症如故，仍未脱离险境，主管治疗医师邀余会诊。其脉弦滑数大，面色如蒸如熏，牙关紧咬，呼吸气粗秽热；撬开口齿，见舌尖红绛，两肘挛急、双手握固，拘紧强硬，难以扳开，手心烧热，腹部硬满而热；辨为毒邪从胃肠而入，损伤脏腑；热毒积聚，脏腑气机淆乱，以针灸合谷、太冲、膻中、内关、百会、人中、三阴交、极泉、尺泽、丰隆、中脘、气海、曲池、阳陵泉等；中药：连翘10、麦冬12、石菖蒲3、枳实10、柴胡10、赤芍15、大黄6克、芒硝6、甘草3克（水煎鼻饲服之），醒脑清心开窍、佐以通便之法，治疗2日，便仍不畅下，神仍昏寐不清，手肘仍挛急不舒，牙关仍闭而不开，诚

觉疑难危重。求教于先师李孔定主任中医师。李师嘱以：青蒿100克，银花30克，白芍30克，生甘草30克，绿豆50克，大黄15克。不意一服而便通热减，2剂而烧退汗止，手足舒软，神亦渐舒，症情因而缓解也。

体会：青蒿银花，清退高热；甘草白芍，柔肝解痉；绿豆甘草解毒，大黄通腑泄热，使毒热邪气，皆有出路，另则腑气一通，而气机之郁闭自解，脏腑之功能自复其常也。由此例此方，始大悟李师“急病用药，宜重宜专”【3】之深意，不惟明辨其证，用药亦须干净利落，寒热虚实，亦有深重轻浅，证轻药轻，证重药亦须重，方能著效，否则如隔靴搔痒，要想挽起沉疴大厄，实为难矣。

3. 讨论

综上述，笔者体会到，在急症临床中，应该注意以下几个方面问题：

1) 四诊合参，病、证同辨；善诊善治、对病对证治疗相结合；注意脏腑阴阳气血平衡、重视阳气对生命的主导作用，善调气机升降出入，或针或药，补、泻、轻、重之治，各合其度，是有效治疗急症昏迷的关键。

2) 业师李孔定主任中医师提出“急病用药，宜重宜专”，量重则功宏，药专则针对性强；药专为量重之基础，是建立在准确的辨病辨证之基础之上，选用能有效逆转临床影响气机升降脏腑阴阳气血平衡的主要病机，迅速改善临床主要症状的药物，进行及时的、针对性的治疗，对于迅速缓解多种危急病症，促进康复和防治并发、后遗症，具有重要的临床意义【3】。

4. 结论

实践证明，中医针灸疗法对于临床急症昏迷的救治有着良好的疗效，中医学数千年临床实践积累了丰富的经验，值得我们在临床中研究学习和应用，这对于挽救生命、维护健康、降低药物毒副作用，防止和减少后遗症，继承和发展中医学，充分发挥中医药在维护人类健康中的积极作用，都有着重要意义。应该指出的是，中医参与急症救治，时机越早，救治成功率越高；越是迟延，病情愈益复杂，尤其阳气式微，阴阳离决，则气机升降出入难复，生机难再也。

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善用血府逐瘀系列治疗子宫内膜异位症及其所致不孕症

蔡琳

伦敦 现代中医馆

摘要:祖国医学对子宫内膜异位症的认识传统上尚无专论, 古籍籍将其归属于痛经与癥瘕。在英国大约有200万妇女患有子宫内膜异位症, 其中大部分发病年龄在25到40岁之间 [1]。其中子宫内膜异位症的主要并发症是难以受孕或无法怀孕。中医与西医之针对临床症状用药从理论认识到临床实践颇为不同。中国传统医学的优势在于整体观念与针对个体的辨证论治并重, 在临床实践中, 善用王清任的血府逐瘀系列活血化瘀, 随证灵活加减, 中医对子宫内膜异位症及其引起不孕症的治疗效果颇显。

关键词: 子宫内膜异位症, 不孕症, 中医, 中草药, 针灸, 推拿, 辨证论治, 活血化瘀。

概述

子宫内膜异位症 (endometriosis, EMT) 指在子宫体外出现子宫内膜组织 (腺体和间质)。最常见的种植部位是盆腔器官和腹膜。据估计在美国该病发生于7%的育龄妇女, 常伴有腹腔疼痛和不孕 [2]。子宫内膜异位症的发病率近年明显增高, 是妇科常见疾病之一。不孕与盆腔疼痛的患者中的发病率为20%-90%。发病率差异较大与诊断方法、医师的经验等因素有关[3]。发生在6%至10%的育龄妇女中 [4-5]。约25%到50%有子宫内膜异位症的妇女患有不孕症 [6]。台湾赵瑞华等医生做的随机对照试验RCT (Randomized Controlled Trial) 结果证明中药在提高子宫内膜异位症患者的术后生活质量上比西药有明显优势 [7]。余医生等在2010年临床观察桂枝茯苓丸及失笑散加减对照口服米非司酮, 总有效率对比为92.11%与73.68%, 结论为活血化瘀中药治疗子宫内膜异位症具有较好的临床疗效[8]。本文着重探讨中西医对子宫内膜症之认识异同及各自的治疗方法, 尤其是中医活血化瘀治疗此症及其引起的不孕症。

西医对子宫内膜异位症及相关不孕症的认识

西医早在19世纪就开始对子宫内膜异位症和体征进行了描述, 认为子宫内膜异位症是一种雌激素依赖性疾病, 但对其发病机制尚未完全阐明。目前普遍认为应该用多因素发病理论来解释, 如子宫内膜种植学说、淋巴及静脉播散学说、体腔上皮化生学说、遗传因素、免疫因素和炎症等。其发病机制与不孕症的病理生理学以及自发性进展仍需进一步研究[2]。子宫内膜异位症主要见于育龄妇女, 有报道在青春期和绝经后接受激素替代治疗的妇女中也有发生[9]。子宫内膜异位症在组织学上虽然属于良性病变, 但具有类似恶性肿瘤的种植侵蚀及远处转移的能力[3]。

在有盆腔疼痛或不孕的妇女中, 有报道子宫内膜异位症发病率比较高 (低至20%, 高至90%) [10,11]。在无症状已

进行输卵管结扎的妇女中, 子宫内膜异位症的发病率为3%-43% [12-17]。各报道中发病率差异较大有几个方面的原因, 如诊断方法不同, 手术医生经验差异等等。说明在对子宫内膜异位症的发现和确诊方面亟需改进。

临床表现及检查

在临床上, 对有生育能力降低、痛经、性交痛或慢性盆腔疼痛的妇女应疑有子宫内膜异位症。但是, 子宫内膜异位症也可能是无症状的。从疼痛症状发生到手术确认子宫内膜异位症之间的平均时间很长: 在英国为±8年, 美国为±9-12年。近年随着科技进步诊断手段的提高, 诊断延误已经持续下降。患者对子宫内膜异位症的认识也在逐步增加。许多子宫内膜异位症的患者在临床检查时未发现异常。现代西医越来越多的运用影像学, 腹腔镜, 组织学确认子宫内膜异位症。在自然演变方面, 在相当比例的 (30%-60%) 患者中, 子宫内膜异位症呈进展性[2]。

<1> 疼痛: 继发性痛经是子宫内膜异位症的典型症状, 且随局部病变加重而逐年加剧。疼痛多位于腹部及腰骶部, 可放射至阴道、会阴、肛门或大腿, 常于月经来潮前1-2日开始, 经期第一天最剧烈, 以后逐渐减轻, 月经干净时消失。少数患者可能长期少腹痛, 经期甚。

<2> 月经失调: 15%-30% 患者有经量增多, 经期延长或月经淋漓。

<3> 不孕: 子宫内膜异位症患者不孕率高达40% [3]。中度以上的内膜异位症可因盆腔内器官和组织广泛粘连和输卵管蠕动减弱, 影响卵子排出、摄取和受精卵的运行。子宫内膜异位症的排卵障碍发病率为17%-27%, 可能与腹腔液中前列腺素 (PGs) 升高而影响卵泡发育和排卵有关。子宫内膜异位症患者体内B淋巴细胞产生的抗子宫内膜抗体可干扰早期受精卵的输送和着床, 腹腔内巨噬细胞增多亦可吞噬精子和干扰卵细胞的分裂而导致不孕。

<4> 性交痛。

<5> 卵巢子宫内膜异位囊肿破裂。

<6> 其它特殊症状：

肠道异位症：腹痛、腹泻、便秘或肠黏膜充血致周期性少量便血。

泌尿系异位症：异位内膜侵犯膀胱肌壁可在经期出现尿频和尿痛，罕见压迫输尿管时还可出现一侧腰痛和血尿。

手术后腹壁瘢痕异位症：手术后数月或数年出现周期性瘢痕处疼痛和逐渐增大的肿块。

身体其他部位如肺、脑组织、四肢等的内膜异位症尽管少见但也有报道，其症状在病变部位出现周期性疼痛、出血或肿块。

体征：卵巢子宫内膜异位囊肿在妇科检查时可扪及与子宫相连的包块，且包块多固定或有轻压痛。典型的盆腔异位症在妇科检查时，可触及后位子宫，活动度差，直肠子宫陷凹、子宫骶韧带或子宫后壁下段等部位可扪及触痛性结节。若病变累及直肠阴道隔，阴道后穹部或肛查时均能触及，甚至有时可看到局部隆起的蓝色斑点或结节。诊断时需注意与卵巢恶性肿瘤、盆腔炎性包块和子宫腺肌病相鉴别。

治疗与复发

有研究报道服用口服避孕药的妇女发生子宫内膜异位症的危险增加[18]。手术或者西药治疗子宫内膜异位症只能获得暂时缓解，但几乎不能消除子宫内膜异位症的病变。药物治疗方面主要有口服避孕药，孕激素，孕激素拮抗剂如米非司酮及奥那斯酮等，孕三烯酮，丹那挫，GnRH激动剂，芳香化酶抑制剂，非激素药物等等。但副作用较大，降低生育能力。除非进行了根治性的手术，否则子宫内膜异位症倾向于复发。复发率约为每年5%-20%，5年后累及复发率达到40% [2]。

中医学对子宫内膜异位症及其相关之不孕症的认识

祖国医学对子宫内膜异位症的认识传统上尚无专论，古代医学典籍主要将其归属于“痛经”与“癥瘕”中，现代中医教材在中药治疗方面亦参照此二症治疗方法。朱丹溪云“求子之道，莫如调经”。《女科要旨》云：“妇人无子，皆由经水不调，经水所以不调者，皆由内有七情之伤，外有六淫之惑，或气血偏盛，阴阳相乘所致。种子之法，即在于调经之中”。

徐福松和莫蕙医生根据本症发病特点总结为：肝郁气滞，经行不畅，或素体气虚、肾虚，运血无力，或寒邪与血搏结，凝涩于胞脉，或孕产频多，损伤胞脉，使胞宫“离经之血”蓄积胞中，形成瘀血。瘀阻冲任，胞脉、胞络不通，则痛经；

瘀阻胞脉，新血不得归经，则月经过多；瘀滞日久，积而成癥，胞宫、胞络阻滞，则不能摄精成孕，以致不孕[19]。

河北张淑亭医生在《延嗣医案》中提到本病的病机，多责之肝、肺、肾之郁热、阴虚、气滞、血瘀等。言：治之之法，辩证施治，实属棘手。又言：总之，要思求经旨，演其所知，辩证施治，方可病愈能孕[20]。

中医对子宫内膜异位症及其相关之不孕症的辩证论治

1， 寒凝血瘀型：经期下腹冷痛，得热痛减，四肢发冷，唇色淡暗，面色青寒。

投少腹逐瘀汤等温经活血药以化瘀。

2， 气滞血瘀型：经前1-2日或经期小腹胀痛，拒按，经色紫暗有块，血块排出后痛减，经净后疼痛消失。舌紫暗或有瘀点，脉弦滑。

膈下逐瘀汤理气化瘀止痛。

3， 气虚血瘀型：经后1-2日或经期小腹隐隐作痛，或小腹及阴部空坠，喜按，经量少色淡质薄，神疲乏力，面色无华。舌质淡，脉细弱。

圣愈汤化裁益气补血止痛。

4， 瘀热蕴结型：经前、经期少腹灼热疼痛，拒按，经期或前后发热，经色深红，有血块，口苦口渴，烦躁，尿黄便秘，舌红或暗红，或有瘀点瘀斑，舌苔黄，脉细数。

血府逐瘀汤清热理冲，活血祛瘀。

5， 肾虚血瘀型：经期或后期少腹隐痛，喜温喜按，腰酸膝软，头晕耳鸣，月经先后不定期，经色淡暗，或有血块，或量少淋漓，神疲欲寐，性欲冷淡，难以受孕，肛门重坠，大便溏薄，面色晦暗，或面额暗斑，舌淡暗或有瘀斑，苔白，脉沉细或细涩。

以桃红四物汤和归肾丸加减，补肾调冲，活血祛瘀[19,21]。

典型病例二则：

病例一 子宫内膜异位症与不孕

May, 女, 36岁, 市场营销

病史：试孕4年半未果，诊为子宫内膜异位症，单侧输卵管堵塞。经前及经期痛甚，几欲昏厥，冷汗淋漓，需卧床并服用大量止痛药方可度过。两次手术清理输卵管及子宫内膜，但很快即复发。两次IVF失败。医院诊断低于0.3%的受孕几率，故拒绝再次提供IVF。同时因为子宫内膜异位症复发严重，建议摘除输卵管及子宫，并将其列入申请收养名单。患者拒绝手术，不肯放弃生育，遂求诊中医。自述自14岁初潮即有痛经，经色黑，血块多，经量大。月经周期29-32天，经行4-5天。纳可，白带正常，二便调，月经初期时有便秘，

喜热恶寒，手足冷。血六项激素检查结果，促卵泡激素FSH等指标均在正常范围内。排卵期少腹两侧痛，但排卵规律，第10天左右排卵。长期精神紧张，思想压力大。舌淡红，无苔，脉数弦。

辨证：寒凝血瘀，胞宫阻滞

治则：活血化瘀，温经通腑，补肾调经。

治疗：草药汤剂，配合针推。随月经周期不同，调整用药及取穴。

初诊：少腹逐瘀汤，温经汤，失笑散三方合用化裁

针灸取穴：百会，双手单针补法同刺足三里、血海、天枢；右手双针补法刺针及留针中极、中脘。补法留针大赫、归来、三阴交、太冲、肝俞、肾俞、次髎。灸关元俞、命门穴。

推拿：病人仰卧，双膝屈，摩腹揉脐，点按关元、气海、天枢，三阴交、肾俞、志室和涌泉穴，擦法腰骶部、推膀胱经，胆经，脾经。打通经络，恢复周身气机运行，气行则血行。

术后患者自述周身气血通畅，感觉身心轻松，如释重负。

再次来潮已无痛经，情绪亦见轻松。遂少腹逐瘀汤，定坤丹化裁。三月后顺利怀孕，投磐石散化裁，固肾安胎。足月剖腹产一健康男婴。

产子后月经来潮数次，皆无痛经。

按：其夫精子质量差，数量少，五子衍宗丸加减投之。王清任指出：少腹逐瘀汤种子如神。古人不予欺也，实感勤求古训之重要。

病例二 子宫内膜异位症

Maria, 女, 24岁, 硕士研究生

病史：严重子宫内膜异位症2年余。腰腹痛甚，几乎不能直立，疲劳，寒热往来，头疼，位置不定，潮热盗汗，口渴，眠差，无食欲，便秘，需每晚服用西药泻药，大便二日一行，小便痛且数频而色黄，排卵期腹痛，白带多。月经短，周期为21天，经行4-5天，经前及经期腹痛难忍，血块多，量大。一年前，医院手术清除子宫内膜，术后诸症状略减，但两个月后复发如初。舌红苔黄，脉象滑数。

辨证：瘀热蕴结，少阳不和

治则：清热化瘀，和解少阳

治疗：草药汤剂，配合针推。随月经周期不同，调整用药及取穴。

初诊：血府逐瘀汤，清热调血汤，大柴胡汤，失笑散四方合用化裁；

按：在大量活血化瘀药中，配散寒破血见长之失笑散，破散症积宿血，定痛理血。子宫内膜异位症的痛经往往不因瘀下痛减，因故不应仅祛瘀，更应促使瘀血溶化内消，通则不痛。大柴胡汤和解少阳，内泻热结，缓急止痛。

针灸取穴：百会、上星、风池、率谷，双手单针补法同刺足三里、血海、内关、天枢、肝俞、肾俞、关元俞、八髎、腰阳关穴。右手双针补法刺针中极、中脘。

推拿：点按百会、上星，开天门，揉太阳，拿风池；病人仰卧，双膝屈，摩腹揉脐；点按关元、血海、三阴交、肾俞、志室和涌泉穴；擦法腰骶部、推膀胱经、胆经、脾经，疏通经络，活血化瘀。

针推后诸痛即刻缓解，可直立。感觉放松。

复诊：自述腰腹痛减轻，诸症好转。三诊诸症基本消失，少腹及腹股沟仍偶有轻微疼痛，口渴，尿频。随症加减。数周后已无痛经及腹痛。

总结

在临床实践中，中医对子宫内膜异位症及其所致不孕症的治疗效果颇显，与西医之对症用药从理论认识到临床实践颇为不同。历代医家对于此类症状及所致不孕，善用活血化瘀，随证灵活加减，积累了宝贵的理论及实践经验。

张景岳在《妇人规》中明确提出：“种子之法，本无定轨，因人而药，各有所宜”。《内经 素问》疏五过论篇云：“圣人之治病也，必知天地阴阳，四时经纪，五脏六腑，雌雄表里，针灸砭石，毒药所主，从容人事，以明经道，贵贱贫富，问年少长，勇怯之理”。根据1995年元月一日实施的国家中医药管理局发布的《中医病证诊断疗效标准》，将不孕症分为肾阳亏虚、肾阴亏虚、肝气郁结、瘀滞胞宫、痰湿内阻五个证型进行论治。子宫内膜异位症所致不孕症属于瘀滞胞宫，但临床因人而异，常见附加其它症状。吾辈勤求古训，细察个体，理清标本，因人而药，必能迅速改善症状，解除病痛及治愈不孕。然而如何根治子宫内膜异位症而不复发，尚待同道共同努力探索。

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Discussion on Senile Constipation with Hypertension

Lin Cai (London)

Abstract: Symptoms of constipation are common and the prevalence is approximately 16 percent in adults overall and 33 percent in adults older than 60 years. These statistics are according to a newly released position statement on Constipation by American Gastroenterological Association (Bharucha *et al.*, 2013). Traditional Chinese Medicine (TCM) is a growing area of public interest and a common complementary therapy used by patients with constipation in China for many centuries. There were 152,564 subjects who visited TCM clinics only for constipation in Taiwan during 2004 and received a total of 387,268 CHM prescriptions (Jong *et al.*, 2010).

The aim of this study is to investigating the clinical therapeutic effects of using the TCM procedure and principles of diagnosis and treatment of internal diseases to treat elderly constipation accompanied by hypertension using a typical case.

General information

Mr. D, 75 years old, British, retired worker.

Date of visit: Oct. 2013

Chief complaint(s): Constipation with hypertension for 11 years and getting worse one month ago

History of current illness using four inspections

The patient first noticed constipation 11 years ago and he has been seeking medical help such as taking bulk laxatives, osmotic laxatives, non-absorbable sugar, cholinergic agents and other prokinetic agents from his GP or pharmacy on an ad-hoc basis. These treatments did relieve his condition but over time he became more reliant on them. Even with those medicines, he has now started experiencing severe constipation (1 month ago) which was 1 or 2 times a week and difficulty to pass faeces which are like hard and round – shaped chestnuts. He also had his blood pressure taken (160/100 mmHg) and started taking thiazide diuretics or calcium channel blockers 8 years ago. He is still on medicine in order to control his blood pressure. He often felt pain in left

abdominal area with small masses in the lower abdominal area but relieved after defecation. He also experienced a poor appetite and abdominal bloating after eating. He feels thirsty all the time and attempts to drink a lot of water.

Symptoms and signs

Patient is particularly thin. His physical symptoms are: pale and lusterless complexion; dark skin under the eyes; thinning and loose hair, along with continued hair loss; skin is dry and pale. Patient also has poor memory, blurred vision, dizziness, tiredness and no energy. He lacks vitality.

Accompanying symptoms are feeling cold all the time especially hands and feet. Passing urine frequently especially at night, which resulted in a disturbed sleep. He sometimes suffers light palpitations and shortness of breath. And his chest often felt heavy and he suffers headache.

Pertinent physical examination & laboratory findings

Patient has cold limbs. Temperature 36.0°C; pulse rate 85/min, regular; blood pressure 180/110 mmHg; irregular

cardiac rhythm, heart beat rate 89/min. ECG results: slightly ventricular proisystole and sinus tachycardia. Small masses in lower abdominal area, pain when pressed. He had Barium enema X-ray and examination of the rectum and lower, and sigmoid, colon done 11 years ago but nothing was abnormal. Evaluation of intestinal muscle suggested there might be dysfunction because of old age. There were not any other abnormal findings with the lungs, liver and spleen.

GP diagnosis: Chronic senile constipation and hypertension.

Inspection of Tongue: pale and dry tongue with no coating.

Pulse condition: Thready

TCM diagnosis: Constipation with hypertension due to blood & fluid deficiency and kidney deficiency

Treatment principle: Nourish blood and moisturize dryness, tonify kidneys

Formulae and modifications

Run chang wan, and Tian ma gou teng yin.

Prescription

<i>Dang gui 15g</i>	<i>Sheng shou wu 10g</i>	<i>Mai dong 10g</i>
<i>Yu li ren 12g</i>	<i>Sheng di huang 10g</i>	<i>Xing ren 8g</i>
<i>Ma zi ren 10g</i>	<i>Rou cong rong 15g</i>	<i>Tao ren 8g</i>
<i>Xuan shen 8g</i>	<i>Nu zhen zi 10g</i>	<i>Tian ma 15g</i>
<i>Bai shao 10g</i>	<i>Cao jue ming 10g</i>	<i>Gou teng 15g</i>
<i>Zhi shi 8g</i>	<i>Gan cao 6g</i>	<i>Feng mi 10g</i>

One dose per day and for 7 days

Discuss the syndrome differentiation — bian zheng lun zhi (Analysis with evidences Aetiology and pathology in TCM)

In TCM diagnosis and treatment for internal diseases there are five steps which include, recognising the disease based on the information from the diagnostic methods (wang - inspection, wen-olfaction and auscultation, wen - interrogation, qie - palpation), identify the location and nature of a disease, infer the cause and judge the path of genesis of the disease. Choose herbs and formulate a prescription according to Wang et al. (2006)

We should not use strong laxative medicine such as Xuanming fen, Dahuang etc. on elder deficient patient to avoid further damage the Zheng qi. This is a common mistake in many treatments today.

In this case, patient's stools are dry and in hard and round – shaped like chestnuts. Bowel movements are difficult, less than 2 times a week. These are typical symptoms of constipation as defined in Medicine theory and practice (Huang et al., 2009). All symptoms, as previously described, indicate that this patient was suffering from blood and body fluid deficiency, which lead to constipation as suggested by Wang et al. (2009). Because he is insufficient in yin blood and body fluid they fail to moisten the intestines and causes excessive dryness in the intestines according to Wang et al. (2006). Therefore, moistening herbs are needed for the dry

bowels.

Patient is a 75 years old man. In general, elder people are lacking qi and blood, and especially have kidney deficiency. There are 90.81% elder people who were 75-79 years old have kidney deficiency in a research by Lu et al., (2002). 'male...eight eight... tian kui jie, essence less, kidney weaker...' was stated in the 'Yellow Empire Classical' text (Long and Long, 2004). 'Eight eight' means 64 years old. 'Tian kui jie' means body essence runs out. Kidney is in charge of water and qi transformation, which directly affect body fluids and blood formation and distribution suggested by Guo et al. (2008). In this case, because of the accompanying symptoms, considering patient's age, we need to nourish his kidneys to improve the body fluids and blood forming and distribution, as well as his night urine to stop losing body fluid abnormally.

Patient is also suffering with hypertension, which very likely links to the constipation. A health study (Anon., 2009) suggested if elderly patients apply too much force when defecating, muscle tension will overcome the whole body, blood vessels contract, which leads to a sudden jump in blood pressure resulting in an occurrence of cerebro-vascular rupture, hemorrhage, even death.

Patient's illness history is 11 years long, which suggests there is certain qi or blood stagnation, according to ancient TCM theory 'jiu bing bi yu'. Therefore qi and blood moving herbs are needed when we nourishing his blood.

Formular herbs discussion

Dang gui, Sheng di huang, Bai shao and Sheng shou wu nourish blood and moisten the intestines.

Rou cong rong tonifies the kidneys and moistens the intestines. Nu zhen zi also tonifies the kidneys and it is a special herb which particularly benefits constipation in elderly people with deficiency. It has the function of reducing blood pressure. As well as Cao jue ming, for moistening the intestines and reducing blood pressure and lipids.

Tao ren, Ma zi ren, Yu li ren, Xing ren are rich in fat, protein, minerals and vitamins, for strong effect in moistening dryness to lubricate intestines. Feng mi moistens intestines.

Mai dong and xuan shen tonify the yin and body fluids which help moistening the bowel and intestines.

Tian ma, Gou teng help nourish the liver and reduce hypertension.

Zhi shi breaks stagnation and moves the qi in his intestines, which helps the bowel movement.

Gan cao tonifies the qi and harmonizes other herbs.

Treatment plan

Consultation and prescription review once a week

Following up

Patient had 3 bowel movements without much difficulty passing stools in 7 days whilst on herbs. His blood pressure dropped to 160/90. As the prescription worked well, it is better to stay with it without changing, according to TCM theory 'xiao bu geng fang'.

3 months later, patient is able to pass defecation 5

times a week and blood pressure was stable at 140/90. No other accompanied symptoms found.

Experience discussion

Constipation in the elderly is very common. Approximately 16 percent in adults overall and 33 percent in adults older than 60 years according to a newly released position statement on Constipation by American Gastroenterological Association (Bharucha et al., 2013). Many elderly constipation cases have been prescribed laxative medicine inappropriately in both modern medicine treatment and TCM medicine without a comprehensive review of the patients' condition. This has resulted in some Doctors and practitioners prescribing strong laxative medicine or herbs to elderly clients, over a long period. This method of treatment may bring a quick result but can damage the qi and blood of the body. That is why in many cases, constipation becomes chronic and patients have to rely on laxative medicine on a daily basis.

Many elderly people experience organ functions slowing down as they grow old, especially the function of the lungs, spleen and kidneys. The lungs and large intestines are paired organs in TCM. The large intestines can lack in the required energy for moving the bowels when the lung qi is not descending strongly enough. Also spleen and kidney deficiency can lead to qi and blood deficiency, causing the intestines to dry and slow bowel movements - 'No water for boat to float'! Therefore, the nourishing of blood and yin, tonifying qi and moistening the intestines are key in elderly constipation treatment. Improving bowel movements will help reduce or eliminate the symptoms. In order to do this the functions of spleen and kidneys need to be improved and are the foundation for the success of the treatment. If the constipation is accompanied by hypertension, when the constipation symptoms are removed, hypertension will also be improved in many cases. Finally, we can add herbs to reduce the hypertension, such as Tian Ma Gou

Teng Yin. And if the kidneys are significantly deficient, we can also add herbs to tonify the kidneys such as Jin Gui Shen Qi Wan.

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征稿启事

《英国中医针灸杂志》为中英文双语学术期刊，每年三月和九月发行两期，并可在学会网上阅览。本会刊宗旨着重在于为大家提供一个平台和论坛，借此互相沟通学习，不断提高学术水平和质量，从而推动中医针灸的发扬光大。欢迎诸位会员，中医同仁及各界读者慷慨赐稿，与大家共同分享你们的临床经验，典型病例分析，行医心得，理论探讨，中医教育和发展，文献综述和研究报告。并建议大家推荐本刊给病人及其周围之人阅读，让更多英国民众看到并亲身体验到中医之奇妙果效，从而提高中医之声誉，扩大中医之影响。

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

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

下期来稿截至日期为 2014 年 8 月 10 日。若来稿于此日期之后收到，我们会考虑在以后之期刊发表。

Determination of Berberine in *Phellodendron* (Huang Bai) Species

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Abstract: There are two major botanic sources for Chinese medicinal herb Huang Bai, *Phellodendron chinense* (Chuan Huang Bai) and *P. amurense* (Guan Huang Bai). To distinguish the two species, levels of the major active component, berberine, in the two *Phellodendron* species have been determined by using high performance liquid chromatography (HPLC) method. Results have shown that berberine level in *P. chinense* is 5.2%, which is about 3.5 fold higher than that in *P. amurense*. A compound with retention time of 7.8 min. has been detected in *P. amurense* but not detectable in *P. chinense*. This study suggested that the two major *Phellodendron* species can be easily differentiated by detection of the peak with retention time of 7.8 min.

Key Words: Huangbai; *Phellodendron*; Berberine; HPLC; Quality control

Introduction

Huang Bai is one of the most commonly used Chinese medicinal herbs. It has been shown the herb has clear anti-microbial and anti-diabetic activities (1, 2). There are 2 botanic species, *P. chinense* and *P. amurense*, used as Chuang Huang Bai and Guan Huang Bai respectively. It has been reported that both of the species contain berberine as major pharmacologically active component with a higher berberine level being found in *P. chinense* (3, 4). However, it is difficult to distinguish the 2 species morphologically. To maintain clinical efficacy and safety in the applications of Huang Bai, it is important to learn the differences between the 2 *Phellodendron* species in the levels of berberine and other components.

The present study investigated the levels of berberine in authenticated *P. chinense* and *P. amurense*. The findings will help differentiation of the two botanic species and provide useful references to establish appropriate standards for quality control of the herbs.

Materials and Methods

- 1) **Reagents:** Berberine chloride was purchased from Sigma. Hydrastine chloride was provided by the BP lab. Authenticated *P. chinense* and *P. amurense* were gifted by Baptist University of Hong Kong; five unknown Huang Bai samples HB-1 to HB-5 were obtained from Chinese medicine clinics in London.
- 2) **Herb extraction and HPLC analysis:** For determination of berberine, the method published in the BP monographs of *P. chinense* was adapted (5). Herbs were powdered with an electronic grinder. To 0.1 g of the powdered herbs 80 ml of a mixture of acetonitrile and 0.1% orthophosphoric acid (50:50) were added, then sonicated for 40 minutes and diluted to 100 ml with mobile phase. Following filtration the herb extracts were ready for HPLC analysis.

For HPLC analysis, a computerised Shimadzu HPLC-PDA-MS system was used. The extracted herb samples (10 μ l) were injected and analysed on a Phenomenex Luna C18 column (150 \times 4.6 mm, 5 μ m) at 30 $^{\circ}$ C eluted by isocratic mobile phase containing acetonitrile and 1.36% (w/v) potassium dihydrogen orthophosphate (73:27) with a flow rate of 1.0 ml/min. The eluate was detected with a photodiode array detector at 229 nm.

Results

Suitability of the HPLC analysis method: Based on the analysis of standard berberine and hydrastine (Fig 1), the resolution factor of the HPLC method was determined as 9.74 according to the calculation method described in BP Appendix

2-2-46 (6). Following replicated injections, the relative standard deviation of peak area of berberine was found to be 1.22%. These data are well met with the BP requirements.

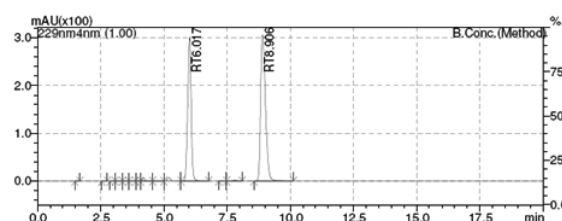


Fig 1. HPLC chromatograph of standard hydrastine and berberine (0.01% of each, w/v)

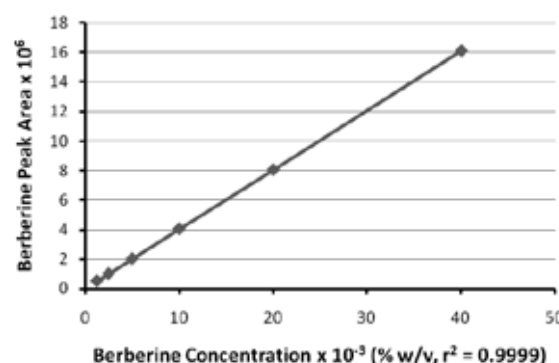


Fig 2. Standard curve of berberine ($r^2 = 0.9999$)

Linear range of the HPLC analysis of berberine: The linear range of berberine for the HPLC analysis was determined. A good linear relation was observed between the HPLC peak area and concentrations of berberine in a range of 0.00125 – 0.04% (w/v). The standard curve of berberine determined by using the HPLC method is shown in Fig 2.

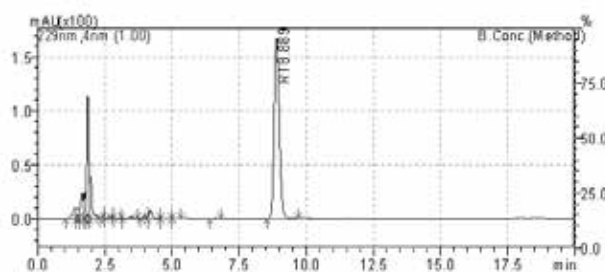
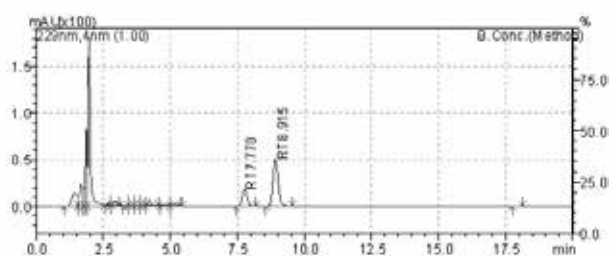
Levels of Berberin in the Authenticated *Phellodendron* Samples: As shown in table 1, levels of berberine were found to be $5.14 \pm 0.13\%$ (w/w) and $1.49 \pm 0.02\%$ (w/w) in the authenticated *P. chinense* and *P. amurense*, respectively. Based on analysis of the authenticated herb samples, berberine level in *P. chinense* was shown about 3.45 folds higher than that in *P. amurense*.

In addition, a specific peak with retention time of 7.8 min was found in the HPLC chromatography of *P. amurense*. The level of this component was found to be about 0.48% (w/w) as equivalent to berberine. The ratio of this component to berberine in *P. amurense* falls in a range of 27-32%. In contrast, this compound was not detectable in species of *P. chinense* (Fig 3, Fig 4).

Table 1 Levels of berberine in the authenticated *Phellodendron* species and BP samples

Samples	Berberine (% w/w)	<i>P. amurens</i> -Specific Peak (% w/w in Equivalent to Berberine)
Standards		
<i>P. chinense</i> Authenticated	5.14 ± 0.13	-
<i>P. amurens</i> Authenticated	1.49 ± 0.02	0.48 ± 0.01
Unknown samples		
HB-1	2.45 ± 0.06	0.72 ± 0.01
HB-2	2.26 ± 0.05	0.61 ± 0.02
HB-3	1.14 ± 0.03	0.42 ± 0.01
HB-4	1.17 ± 0.01	0.31 ± 0.01
HB-5	0.73 ± 0.04	0.31 ± 0.01
Average	1.55 ± 0.76	0.47 ± 0.18

Typical HPLC chromatography of the extracts of authenticated *P. chinense* and *P. amurens* are shown below.

**Fig 3.** HPLC chromatography of the extract from authenticated *P. chinense***Fig 4.** HPLC chromatography of the extract from authenticated *P. amurens*

Levels of berberin in the unknown *Phellodendron* samples:

As shown in table 1, the berberine levels in the 5 *Phellodendron* samples obtained from the London clinics were found to be in a range of 0.73-2.45% (w/w). At the same time, the *P. amurens* specific component was clearly detected in these unknown samples with levels in a range of 0.31-0.72% (w/w) as equivalent to berberine. This result appears to be consistent with that of the authenticated *P. amurens*.

Discussion and Conclusions

- 1) Berberine content in *P. chinense* is about 3.45 folds higher than that in *P. amurens*. The average level of berberine was found to be 5.14% in the authenticated *P. chinense* and 1.49% in *P. amurens*.
- 2) *P. amurens* contains a peak with retention time of 7.8 min in comparison with *P. chinense*. This peak is possibly from palmatine according to previous literature reports (3, 4). This component is not detectable in *P. chinense*. By detection of this peak, it may be a great of help for

differentiation of the two major species of Huang Bai.

- 3) The HPLC profiles of the unknown *Phellodendron* samples from the Chinese medicine clinics are consistent with that of *P. amurens*. The average level of berberine in the 5 *Phellodendron* samples is 1.55% with an average level of potential palmatine at 0.47%, suggesting that most of Huangbai supplied on the UK market are *P. amurens* (Guan Huangbai).
- 4) We also investigated the levels of berberine in Huangbai granules from various manufacturers. Significant variations in berberine levels were found (data not shown). This will raise questions on safety and efficacy in clinical applications of this herbal product.

Acknowledgement

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中药制剂的安全性评价

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摘要

目的: 分析中药制剂不良反应(ADR)的特点、一般规律及影响因素,以促进临床合理用药。

方法: 采用回顾性分析方法,对我院2007~2009年收集到的93例中药制剂ADR报告分别从患者年龄、药品种类、给药途径、涉及器官或系统以及临床表现等方面进行统计、分析。

结果: 中药注射剂是引起ADR的主要剂型(93.55%);其中心脑血管用中药制剂引起的ADR所占比例最高(占中药制剂的59.14%)
结论:应及时报告中药制剂ADR,加强对其监测的意识,保障临床用药安全、有效。

关键词: 不良反应;中药制剂;心脑血管用药;合理用药

中药不良反应是指在中医药理论指导下,用于预防、诊断或治疗人的疾病,改善人的生理功能而给予正常剂量中药后所出现的任何有害且非预期的反应[1]。随着医药工业的发展,我国传统医药也得到了剂型和品种不断增加。临床应用的不断增加,不良反应的报道也逐年增多。2007~2009年我院上报的538例ADR报告中,中药93例(占17.29%),仅次于抗感染药物,位居第二。其中中药注射剂87例,占中药不良反应的93.55%,在所用的ADR报告中,心脑血管用药有55例,用药剂型全部为中药注射剂,占中药不良反应的59.14%。本文对以上ADR资料进行回顾性分析,旨在了解我院中药制剂ADR发生特点,为临床更加合理、安全、有效使用药物提供参考依据。

1. 资源与方法

1.1 资料来源与处理

收集2007~2009年我院各科室呈报的有效ADR报告538例,选择中药制剂引起的ADR 93例,用SPSS 10.0统计软件进行统计分析。

1.2 数据分析

对93例中药制剂ADR报告中患者性别分布、患者年龄、药品种类、给药途径、涉及器官或系统以及临床表现、ADR分类等进行回顾性分析。

2 结果与分析

2.1 患者相关信息

发生ADR的93例病例中,男性38例(54.29%),女性32例(45.71%);患者年龄9m~95a,平均55.62a;42名心脑血管用药患者中,男性23例(54.76%),女性19例(45.24%),患者年龄9m~95a,平均56.06a。具体年龄分布详见表1。

2.2 药品给药途径分布

药品不同给药途径所致ADR的构成比详见表2。

2.3引起ADR的药物及引起ADR的药品种类分布

将93例ADR涉及的药品进行分类统计,引起ADR的药物详见表3,引起ADR的药品种类分布详见表4。ADR的发生例数由大到小依次为注射用血塞通(9例,占12.86%)、灯盏细辛注射液(5例,占7.14%)银杏达莫注射液、痰热清注射液、得力生注射液、舒肝宁注射液、注射用七叶皂苷钠(各4例,分别占5.71%)等药物,位于前15位的均为中药注射剂。药品种类涉及心脑血管用药、消化系统用药、抗病毒药、抗

表1 发生ADR年龄分布

年龄/a	例数/n	构成比/%	心脑血管用药例数/n	心脑血管用药构成比/% (占总例数)
<18	5	7.14	4	5.71
18~39	10	14.29	6	8.57
40~59	22	31.43	12	17.14
>60	33	47.14	20	28.57
合计	93	100	42	60

表2 不同给药途径所致ADR的构成比

给药途径	例数 n	构成比 %	心脑血管用药例数 n	心脑血管用药构成比 % (占总例数)
静脉滴注	64	91.43	42	60
口服	6	8.57	0	0
合计	93	100	42	60

表3 引起ADR的药物

引起 ADR 的药物	例数/n	构成比/%
注射用血塞通	9	12.86
灯盏细辛注射液	5	7.14
痰热清注射液	4	5.71
得力生注射液	4	5.71
银杏达莫注射液	4	5.71
舒肝宁注射液	4	5.71
注射用七叶皂苷钠	4	5.71
参芪扶正注射液	3	4.29
复方麝香注射液	3	4.29
疏血通注射液	3	4.29
注射用血栓通	3	4.29
丹香冠心注射液	3	4.29
醒脑静注射液	3	4.29
舒血宁注射液	2	2.86
参脉注射液	2	2.86
大黄蛰虫丸	1	1.43
肠泰合剂	1	1.43
小金丸(微丸)	1	1.43
茵栀黄颗粒	1	1.43
注射用双黄连	1	1.43
葛根素注射液	1	1.43
苦碟子注射液	1	1.43
虎力散胶囊	1	1.43
艾迪	1	1.43
参附注射液	1	1.43
防风通圣丸	1	1.43
脉络宁注射液	1	1.43
生脉注射液	1	1.43
喜炎平注射液	1	1.43
合计	93	100

肿瘤及辅助药等。其中心脑血管用药15种42例，均为中药注射剂，其药品种数占总药品种数的51.72%，发生ADR例数占总例数的60%。

2.4 ADR涉及的器官系统及主要临床表现

ADR涉及的器官系统及主要临床表现详见表5。表5中ADR发生的总次数为大于总例数，是因为有些药物所造成的不良反应可涉及多个器官系统。

2.5 ADR类型

93例中药制剂及42例心脑血管用药不良反应报告的类型分布见表6。均以新的一般的ADR居多。

3. 讨论

发生ADR的93例病例中，男性38例（54.29%），女性32例（45.71%），男女比例为1.19: 1，男性患者略多于女性患者，此结果与文献报道[2]相一致。在心脑血管用药一组中男性23例（54.76%），女性19例（45.24%），与上述比例基本一致。

随着心脑血管疾病的逐年增加，中药制剂在心脑血管疾病方面的应用越来越广泛，由此引起的ADR报道也在不断增加。老年人是心脑血管疾病的易患人群，由表1可知，年龄大于60岁组的ADR发生率最高为47.14%，而心脑血管用药就占28.57%。老年人组织器官的老化和生理功能的减退是导致老年人ADR发生率较高的重要因素，具体表现在：随着其肝、肾功能减退，肾小球滤过率及肾小管分泌能力降低，肾血流量明显减少而影响体内药物的排泄；肝血流量降低、肝药酶活性减弱而致解毒能力下降；组织器官功能减退，靶器官对某些药物作用的敏感性增加；对药物剂量个体差异大，药效阈值变窄，易发生药物蓄积 [3, 4]。

表4 引起ADR的药品种类分布

药品种类	药品数/种	药品数构成比/%	例数/n	例数构成比/%
心脑血管用药	15	51.72	42	60
抗肿瘤及辅助药	3	10.34	8	11.43
消化系统用药	3	10.34	6	8.57
抗病毒药物	3	10.34	6	8.57
其他	5	17.24	8	11.43
合计	29	100	93	100

表5 ADR涉及的器官系统及主要临床表现

涉及的系统或器官	次/n	构成比/% (占总次数)	心脑血管用药次/n	心脑血管用药构成比/% (占总次数)	临床主要表现
皮肤及附件	32	32.65	19	19.39	皮疹、荨麻疹、瘙痒
全身性损害	20	20.41	10	10.20	发热、寒战、过敏性休克、疼痛
神经系统	14	14.29	14	14.29	头晕、头痛、意识障碍、肢体麻木
消化系统	12	12.24	7	7.14	有关恶心、呕吐、腹泻
呼吸系统	12	12.24	7	7.14	呼吸困难、咳嗽、气喘、胸闷、紫绀
循环系统	7	7.14	5	5.10	心悸、血压下降、紫绀
心外血管损害	1	1.02	1	1.02	静脉炎
合计	98	100	63	64.29	

表6 ADR类型分布

ADR 类型	例数/ n	构成比/%	心脑血管用药例数/ n	心脑血管用药构成比/% (占总例数)
一般的 ADR	26	37.14	18	25.71
新的一般的 ADR	40	57.14	23	32.86
新的严重的 ADR	4	5.71	1	1.43
合计	93	100	42	60.00

由表2~表4可知,发生ADR的药物大多数为中药注射剂(91.43%),而42例心脑血管用药全部为注射剂;心脑血管用药发生ADR的品种(51.72%)和例数(60%)均为最多。其原因一方面与心脑血管疾病发病率逐年升高有关,另一方面药材原料、生产工艺及药物的使用等原因也是导致中药注射剂发生ADR的重要因素。

过敏反应是中药制剂常见的ADR之一。由表5可知,ADR所涉及的器官系统以皮肤及附件最高。中药材的质量受产地、季节、炮制、加工的影响很大,使得产生ADR的物质极难控制和把握。加之中药成分复杂,按生理活性可分为有效成分及杂质,其中导致机体过敏的物质,如药物本身的动植物蛋白、多肽、多糖等大分子物质,可能同时具有免疫原性抗原,从而刺激机体产生免疫应答,使机体产生抗体或致敏淋巴细胞,导致变态反应的发生[5]。另外,制剂中的添加剂、增溶剂、稳定剂等均能引起过敏反应。由表3可知,引起不良反应的药物中血塞通位于首位(9例),占总例数的12.86%,占心脑血管用药例数的21.43%。血塞通的主要成分为三七总皂苷,具有活血祛瘀、扩张血管、改善血液循环的作用[6]。过敏反应是血塞通注射液最常见的不良反应,以皮肤过敏反应为主,偶有休克、类休克等严重过敏反应。静滴血塞通注射液引起过敏反应的原因可能为速发型药物的变态反应,是当易感性个体的B淋巴细胞在接受药物或其代谢刺激后,逐渐增生转化为浆细胞,分泌IgE抗体,抗原抗体结合后会激活细胞内酶,导致靶细胞膜脱颗粒,释放组织胺、五羟色胺、缓慢反应物质等药理活性物质,血小板激活这些活性

物质可导致平滑肌痉挛,毛细血管扩张,通透性增高,腺体分泌亢进等一系列的临床症状[7]。

配伍不当是中药注射剂引起ADR的主要因素之一。注射用血塞通在加入不同体积的各种输液中时,微粒数会有不同程度的增加[8]。复方丹参注射液与0.9%氯化钠注射液配伍后,微粒数量明显增加且严重超标[9]。因微粒不能在体内代谢,故可发生肉芽肿、肺水肿、静脉炎、血栓、组织坏死、过敏、热原和肿瘤样反应[10]。中药注射剂与某些抗生素配伍静脉滴注可致药液pH发生改变、浑浊、沉淀、微粒显著增加,随之颜色也发生改变,药效降低[11]。因此,临床上在静脉滴注中药注射剂时,要选择合适体积的液体品种稀释药物,中药注射剂要单独使用,不要盲目与其他药物加到同一瓶液体中使用。

使用剂量或用药时间不当也是中药制剂引起ADR的因素之一。传统认为中药的毒副作用小,所以在用药剂量和用药时间上会随意增大剂量或延长用药时间,从而导致药物在体内蓄积而中毒。心脑血管患者大多数为中老年人,因各器官系统的退行性改变,对药物的代谢和排泄也会随之改变,对药物的敏感性提高,如果超剂量使用药物或延长用药时间就更易引起ADR的发生。临床上常有超剂量使用中药注射剂的情况,如注射用血塞通,药品说明书推荐静脉滴注的剂量为200~400毫克/天,以5%或10%的葡萄糖注射液250~500稀释后缓慢滴注,而临床医嘱中常用剂量为800毫克/天。所以,临床上应根据患者的具体状况,调整用药剂量,做到个体化

给药。特别是对年龄较大、体重较轻、一般情况较差的老年患者应从“最小剂量”开始[12]。

药物相互作用是中药制剂引起ADR的另一因素。老年患者常多系统疾病并存，所需治疗药物也相对较多。临床上常遇到患者同时患有高血压，冠心病、慢性肾功能不全、脑血管病、糖尿病及其他感染情况等。需要同时服用几种甚至十几种以上药物[12]。中西药物并用可通过对CYP（细胞色素P450）酶系相应亚家族选择性地诱导和抑制，从而改变单纯使用某种中、西药物的疗效和毒性反应。酶的诱导可增加生物转化率，从而降低药物的浓度，通常表现为药物的作用降低；若代谢形成活性药物则可增加药物的毒性。而酶的抑制可增加药物浓度，延长药理作用时间，药物引起毒性反应的发生率也会增加[13]。人体试验表明，银杏叶提取物能够对CYP3A4产生显著抑制作用，增加53%的CYP3A4的底物尼非地平的血浆浓度[14]。由于很多中药的作用机制尚不明确，许多中药与西药间以及中药与中药间的相互作用机理还不清楚。因此，心脑血管患者特别是老年患者当中西药物合用时应注意药物之间的相互作用和影响，有条件的单位应对治疗范围窄，毒性大的药物进行血药浓度监测，减少ADR的发生。

由表6可知，ADR类型以新的一般的ADR为最多40例（57.14%），新的严重的ADR有4例（5.71%），心脑血管用药新的一般的ADR有23例（32.86%），新的严重的ADR有1例（1.43%），可见仅说明书上没有的不良反应就占62.86%。由于传统认识的原因，人们对于中药的不良反应认识不足，有些中药的说明书上没有不良反应项，有些叙述比较简单，随着中药注射剂应用日渐增多，中药不良反应的报告逐渐增加，建议生产企业应完善药品说明书中不良反应项，预防不良反应的发生。

随着社会的老齡化，心脑血管疾病的发病率将会逐渐增高，心脑血管药物的应用越来越广泛，心脑血管用中药制剂的开发也会越来越多，建议药监部门加强监管力度，完善中药质量标准，建立中药不良反应监测系统，加强中药再评价。在应用上应根据中老年心脑血管病患者的生理特点，采用个体化给药，提高疗效，避免不良反应的发生。

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Treatment and Management of Chronic Cough by TCM

– A Case Study

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Introduction

The patient has been suffering from chronic cough with phlegm for nearly 30 years. He started to receive acupuncture and Chinese herbal medicine treatment since September 2012. Modified Qing Qi Hua Tan Wan and Shen Ling Bai Zhu San have been used at acute and chronic stages respectively. Significant improvement has been observed. A summary of the treatment and the usage of above modified formulae during the treatment are discussed below.

History of treatments

Date of first consultation: 05/09/2012

Gender: Male

Age: 39

Nationality: Irish

Occupation: Company director

Chief complaints:

1. Chronic cough with phlegm
2. Loose stool with occasional diarrhoea

History of current illness and symptoms

The patient had two episodes of pneumonia from age 9 to 11, and has been coughing with phlegm ever since. There is no particular pattern regarding the time and the triggering or alleviating factors. He has been suffering from recurrent chest infections and has to use antibiotics (mostly amoxicillin, and sometimes stronger ones which the patient could not remember the names) at least every two months. The colour of the phlegm is mostly white, but could get greenish when there were chest infections. Even when there is no chest infection, he often feels stuffed and tight in the chest and he also experiences short breath on exertion. He loves sports, but the shortness of breath and tight chest really put him off. He feels frustrated because of this.

The patient's bowel movement is regular, but the stool is mostly loose and sticky with occasional diarrhoea. He experiences some urgency in both bowel movement and urination. He does not suffer from any bloating, pain or acid reflux.

The patient did not complain about his sleep. He can fall asleep easily but often wakes up a few times (sometimes only due to the crying baby and can go back to sleep most of the time), and occasionally sleep can be disturbed by dreams. He sometimes feels tired during the day, but generally feels healthy. He was diagnosed to have Kartagener syndrome and has one daughter of 12 months old through IVF.

Tongue: slightly swollen with some teeth marks. The colour of the tongue is slightly pale. The coating of the

tongue is thick, particularly in the middle of the tongue, and the colour of coating is slightly yellow and sticky.

Pulse: wiry, fast and full. The chi position is relatively weak.

On the day of his first visit in September 2012, the patient just had one episode of chest infection about a week before. The main symptoms included barking cough with yellow thick phlegm. He felt stuffed in the chest with difficult breathing. He also had some pain in the lung area through coughing. He had some sore throat but no obvious headache. He had been aversion to cold at the beginning, but not anymore on the day of his visit.

TCM diagnosis and treatment principles

Exterior wind - heat invasion combined with interior damp - phlegm. This is an acute excess condition. Spleen qi and Lung qi deficiency is the root of the problem and is the cause of chronic cough and phlegm accumulation. However, in an acute condition, symptoms should be dealt with first. Therefore, in this case, the treatment principle is to clear the Lung heat, descend the Lung qi and resolve the phlegm. The background of Spleen and Lung qi deficiency should also be considered.

Initial and follow - up treatments

First visit (05 September 2012): A modified *Qing Qi Hua Tan Wan* was prescribed.

<i>Ban Xia</i> 9g	<i>Zhe Bei Mu</i> 6g	<i>Xing Ren</i> 6g
<i>Zhi Ke</i> 6g	<i>Gua Lou Ren</i> 6g	<i>Chen Pi</i> 6g
<i>Fu Ling</i> 6g	<i>Kuan Dong Hua</i> 6g	<i>Huang Qin</i> 8g
<i>Bai Zhu</i> 9g	<i>Jin Yin Hua</i> 6g	<i>Lian Qiao</i> 6g
<i>Gan Cao</i> 6g		

The patient was advised to take the medicine as decoction. 7 bags of dry herbs with the above ingredients were prescribed, one bag for one day. An instruction of making decoction was provided to the patient.

Second visit (12 September 2012): There was still coughing, but it had reduced. The colour of phlegm was no longer green, but still a bit thick. The patient felt tired. The pulse was deep. The tongue coating was still thick but less yellow. The above formula was modified. *Jin Yin Hua* and *Lian Qiao* were removed and *Dang Shen* (6g) was added to the formula. The patient was asked to take this formula for further 7 days.

The third visit (17 September 2012): The overall condition was much improved. There was still cough, but the patient described it as "normal cough", because he had had this kind of cough for many years. There was

still phlegm, but it was more watery and the colour of the phlegm was white. The bowel movement had not changed and the stool was generally loose and sticky. There was no change of the tongue and pulse. A modified Shen Ling Bai Zhu San was prescribed.

<i>Ren Shen 6g</i>	<i>Bai Zhu 10g</i>	<i>Fu Ling 10g</i>
<i>Bian Dou 10g</i>	<i>Shan Yao 15g</i>	<i>Yi Yi Ren 10g</i>
<i>Jie Geng 9g</i>	<i>Chen Pi 6g</i>	<i>Zhi Gan Cao 6g</i>
<i>Zhi Ke 6g</i>	<i>Ban Xia 9g</i>	<i>Xing Ren 9g</i>
<i>Huang Qin 3g</i>	<i>Gua Lou 3g</i>	<i>Wu Wei Zi 6g</i>

The patient was advised to take this formula as decoction for 7 days.

The fourth visit (24 September 2012): The patient felt the condition was slowly improving. He had a bit more energy. There was still cough, but he described it as “not too bad even for the normal standard”. The bowel movement had not change a lot. The pulse was deep and slow, and the tongue was the same.

The same formula was prescribed for the next 6 weeks. The patient visited the clinic every week. During these 6 weeks, the patient reported the improvement was noticeable. The cough did not disappear but noticeably less and the chest felt clearer and no longer had stuffed feeling. The patient took a short holiday to visit his parents, and for the first time he could run without feeling short breath during the holiday. He had been exercising ever since and had no problem. The stool had improved as well. It was more formed, but still not consistent. He felt less urgent before bowel movement and urination.

The patient has been taking similar formula based on modified *Shen Ling Bai Zhu San* so far (with small modification each time). He had a cold once before Christmas and it did not go deep to the chest as it used to happen in the past. When he visited his doctor after Christmas, the doctor, who had been treating him for many years, examined him and said his lungs were much clearer than before and the condition of the lungs had been improved significantly. The patient can have regular exercise now without any breathing problem. The energy has significantly improved. The cough has not disappeared though, but much more manageable. The phlegm is much less and much “looser”. The stool is mostly formed, but is not completely stable. The coating of the tongue is receded and the pulse is stronger.

Discussion

Cough is one of the most common symptoms in all diseases related to the lungs. Cough was first discussed in *Huang Di Nei Jing* (黄帝内经). The whole Chapter 38 is dedicated to the discussion of cough. The cause of cough was summarized in *Jing Yue Quan Shu* (景岳全书) as external pathogen and internal disharmony. This needs to be first identified in pattern differentiation. It is also important to differentiate excess or deficiency. “The pathology of cough is always characterized by Lung - qi failing to descend. This may happen either because the lungs are obstructed by an exterior or interior pathogenic factor (Full type) or because Lung - qi is deficient and fails to descend properly (Empty - type).” (Maciocia,

1994, P. 172) Cough caused by exterior pathogen (wind - cold, wind - heat or wind - dryness) is generally full type (excess). The cough from interior causes can be either excess (damp - phlegm, phlegm-heat, fire or phlegm - fluid) or deficiency (Lung qi or yin deficiency). Chronic cough often shows deficiency in some way. For example, the chronic cough from damp - phlegm is excess in nature, but the phlegm could be caused by Spleen deficiency, and accumulated phlegm can generate heat and damage the Lung qi and Lung yin and cause Lung qi and yin deficiency. Deficiency in interior zang fu can make the Lung more susceptible to exterior pathogens. It is described in *Huang Di Nei Jing Ling Shu* (黄帝内经灵枢) that wind, rain, cold and heat, without deficiency, the evil cannot harm the body (风雨寒热, 不得虚, 邪不能独伤人). (Yao, 2010)

The treatment plan reflected the general principle of “treating the symptoms at acute stage, and treating the root at chronic stage” (急则治其标, 缓则治其本). From the first consultation, it was realized that the cough was chronic and the patient showed symptoms of Spleen qi deficiency, which might affect the Lung qi, and the Lung qi was expected to get depleted from chronic cough. Moreover, “in terms of Chinese medicine, the use of antibiotics, which are cold and damp in nature, will relieve symptoms due to Stomach fire or perhaps yin deficiency. However, they severely deplete Spleen qi and cause accumulation of damp”. (Gascoigne, 2001, P. 237) However, it was a condition which combined the excess from acute symptoms and deficiency from the chronic underlining issues. In this situation, the acute symptoms should be dealt with first. Therefore the modified Qing Qi Hua Tan Wan (in decoction form) was prescribed.

The main functions of *Qing Qi Hua Tan Wan* are to clear the heat and resolve the phlegm, regulate the qi and stop coughing (Xu and Wang, 2008). In the original formula, *Dan Nan Xing* is the principal herb. It is bitter, slightly pungent and cool in nature and is used to clear the phlegm - heat. Since *Dan Nan Xing* is not allowed to use by regulation, *Zhe Bei Mu* is used for the similar purpose, and the dosage of *Huang Qin* is slightly increased to clear the Lung heat. In this formula, *Huang Qin*, bitter and cold, is used to clear the fire from upper jiao; *Gua Lou Ren*, sweet and cold, is used to clear the Lung and resolve the phlegm; *Zhe Bei Mu*, also bitter and cold, is used to clear the Lung heat and resolve the phlegm. Wang Ang said in *Yi Fang Ji Jie* (医方集解) that it is necessary to reduce the fire in order to treat the phlegm, and it must regulate the qi first in order to treat the fire (cited in Xu and Wang, 2008). *Zhi Ke* and *Chen Pi* were used to regulate the qi and dry the dampness, because it is important to regulate the qi in order to resolve phlegm. *Zhi Ke* was used instead of *Zhi Shi* as in the original formula. Both *Zhi Shi* and *Zhi Ke* are bitter, slightly cold and enter Stomach and Spleen meridians. “*Zhi Shi* has stronger bitter taste and it moves downwards strongly.” (Yang, 2010, P. 123) Considering that the patient had loose stool and occasionally had diarrhoea, milder *Zhi Ke* was selected. Another reason of choosing *Zhi Ke* is that “it opens the chest and reduces distension, and is used to treat qi stagnation in chest, stomach and

hypochondrium, which brings about distension in the upper abdomen, stifling in the chest.” (Yang, 2010, P. 123) Since Spleen is the source of the dampness and phlegm, *Fu Ling* is used to tonify the Spleen and drain the dampness. *Xing Ren* is used to disperse the Lung qi. Ban Xia can dry the dampness and resolve the phlegm. It helps to resolve the phlegm which already generated, and stops the source of the phlegm (Xu and Wang, 2008). *Bai Zhu* is added to the formula to tonify the Spleen and clear the dampness. This is particularly important considering the patient’s bowel movement pattern. *Kuan Dong Hua* is pungent, slightly bitter and warm in nature. Its main function is to moisten the lung and stop coughing. Although *Kuan Dong Hua* is warm in nature, it can be used in all cold, heat, excess and deficient situations (Gao, 2000). *Gan Cao* is used to tonify the Spleen and harmonize the herbs in the formula, and *Gan Cao* itself is also useful to stop coughing. “It treats coughing and wheezing of various aetiologies, including cold or heat, and deficiency or excess, with or without phlegm.” (Chen & Chen, 2004, P. 867) *Jin Yin Hua* and *Lian Qiao* were added to the formula because the patient’s condition was in an acute stage with green coloured phlegm. Both *Jin Yin Hua* and *Lian Qiao* are cold in nature and enter the Lung meridian. They can be used in heat clearance and detoxification. *Jin Yin Hua* and *Lian Qiao* are often used together in febrile disease, such as in *Yin Qiao San*. (Zhang, 1990)

On the second visit, the patient felt better. The colour of the phlegm was no longer green and the tongue coating was less yellow as well, but the patient still had cough and phlegm and felt tired from heavy coughing. *Jin Yin Hua* and *Lian Qiao* were therefore removed from the formula and *Dang Shen* was added to tonify the depleted Spleen and Lung qi due to the illness.

On the third visit, the acute symptoms had disappeared, but the chronic cough had not stopped. This was described by the patient as his “normal cough”. From this visit, the treatment principle changed from clearing the Lung heat and resolving the hot phlegm to solidify the root through tonifying Spleen and Lung qi, descend the Lung qi, stop coughing and resolve phlegm.

The formula is based on *Shen Ling Bai Zhu San*, which is a fundamental formula for tonifying the Spleen qi, draining dampness and stopping diarrhoea. It also reflects the theory of “solidifying the earth and generating the metal” (培土生金), therefore benefits the lungs. In this formula, *Ren Shen*, *Bai Zhu*, *Fu Ling* and *Zhi Gan Cao* are based on qi tonic formula *Si Jun Zi Tang*. *Shan Yao* and *Bian Dou* (*Lian Zi* was not used due to availability) tonify the Spleen and Stomach mildly and help to stop diarrhoea. *Zhi Gan Cao* is used here because it has more tonifying effect for Spleen compared with *Sheng Gan Cao*. The dosage of *Huang Qin* and *Gua Lou* has been reduced because the patient no longer showed the sign of heat phlegm. *Shan Yao* and *Bian Dou* benefit the Spleen and Stomach and stop the diarrhoea. *Fu Ling* and *Yi Yi Ren* drain the dampness and tonify the Spleen. *Chen Pi* and *Zhi Ke*, as in the previous formula, help to regulate the qi and descend the Lung qi. *Chen Pi* is often used in tonifying formula to regulate the qi and prevent the tonic herbs causing stagnation. It is “aromatic and

warm to promote the downbearing of qi, regulates the middle and frees the diaphragm”. (Li et al, 2008, P. 177) *Jie Geng* in this formula plays an important role of taking the other herbs upwards and helps to disperse the Lung qi. “The inclusion of *Jie Geng* as a channel conductor guides the other medicinals to the upper jiao to support the Lung, for its light, floating, and ascending nature enriches Lung yin and upbears Lung qi”. (Hu and Dong, 2008, P. 141) It brings the Spleen qi upwards and nourishes the Lung. This reflects the theory of solidifying the earth and generating the metal. *Wu Wei Zi* was used because it is astringent and enters Lung, Heart and Kidney meridians. One of its main functions is to treat chronic empty cough (Zhang, 1990).

Prognosis and future treatment

The patient has noticed significant improvement in regard to the severity of the cough, the texture of the phlegm, the breathing, energy and bowel movement pattern. However, it is noted that the patient is still coughing with phlegm, and the improvement of bowel movement is not consistent. This indicates the current treatment is on the right direction, but a prolonged treatment is necessary. Modified *Shen Ling Bai Zhu San* or *Si Jun Zi Tang* can still be used in this case, with added herbs to resolve the phlegm, descend the Lung qi and stop coughing. In the future treatment, *Huang Qi* can also be used in the modified formula, as *Huang Qi* can tonify both Spleen and Lung qi, and its qi tonic effect can be strengthened when used along with *Ren Shen* (Gao, 2000).

Strengthening Kidney is another area worth considering in the future treatment. Kidney is considered as “the root of life” (Maciocia, 2005). This can be understood in two aspects. On the one hand, the Kidney yin and Kidney yang derived from Kidney essence are the primary yin and yang. They support the whole body and affect the physiological functions of all other organ systems. In particular, Kidney yang provides the Spleen with the heat it needs to carry out its function of transforming and transporting fluid (Maciocia, 2005). On the other hand, chronic disease or malfunction of any other organ system will eventually affect the Kidney. Another important function of the Kidney is to hold the qi, which is descended from the Lung. The Lung’s descending function will be impaired if the Kidney does not receive the qi properly. The patient was diagnosed to have Kartagener syndrome, a rare condition which affects the cilia of both the Lung and the sperm, and therefore affecting the mobility of the sperm. He also experiences urgency of urination and bowel movement. Since the Kidney controls the fertility and lower orifices, these could indicate the potential need of tonifying the Kidney qi and replenish the Kidney essence. Herbs for this purpose include *Du Zhong*, *Bu Gu Zhi*, *Yi Zhi Ren*, *Ba Ji Tian*, *Tu Si Zi*, *Yin Yang Huo*, *Shu Di Huang*, *Shan Zhu Yu* and *Gou Qi Zi*. Some of these herbs can be combined with modified *Shen Ling Bai Zhu San* for the future treatment.

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Treatment and Management of Lumbago with Du Huo Ji Sheng Tang and Yuan Hu Zhi Tong Wan – A Case Study

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Patient overview

Female, 50 years old, Married, Office worker.

Chief complaint(s)

Lower back pain (Lumbago) for 9 years exacerbated for the last 2 weeks.

History and Symptoms

The patient has been experiencing intermittent pain on her lower back for 9 years. The cause of this was an injury from a car accident. After the accident the patient was taken to the hospital for further tests. The X-ray done on her back shown two prolapsed lumbar discs at L4 and L5. She has then been referred by her GP for 6 Physiotherapy sessions and also been taking Paracetamol 1000mg, 4 times/day. After Physiotherapy, the pain has changed from stabbing pain to a more dull one. Subsequently administering the painkillers for a couple of months, the patient has stopped taking them gradually. Occasionally, when the pain becomes more severe, she takes the prescription again for a couple of days until the

pain improves.

Two weeks ago, due to cold-rainy weather her dull pain began to be more of a strong ache in her sacrum. The administration of the painkillers for five days had no effect. The initial pain is now accompanied by an intense shooting pain going down on both sides of the legs up to the ankles, neck and upper arms. It is aggravated by prolonged sitting and cold weather. Moving around alleviates the sufferings, although generally the back feels stiff and tense. Scans and other tests for her back have not been repeated since her accident. The GP diagnosed her with Sciatic Pain and prescribed her Codeine 30 mg every 6 hours, but the patient refused to take them. Instead she started Acupuncture.

The patient is very concerned in continuing her office work and feels quite low emotionally.

The constant worrying and the pain have affected her sleep and currently she can only manage to sleep five hours per night. The energy level is normal. Has started a few months ago menopause with little hot flashes.

The patient has no history of major illnesses and is otherwise in good health.

Tongue and pulse

Tongue: enlarged, pale with teeth marks and greasy white coating.

Pulse: Deep and weak.

Clinical observation

Scoliosis from T11 to L5 from right to left can be observed in standing inspection. In motion testing, the patient has limited movement in forward flexion, lateral flexion (worse left side) and sitting rotation. Hip external rotation is limited. Along the Thoracolumbar fascia, the muscle area felt tense (particularly on the left side) and also tender. On palpation, pain could be felt in points like BL25, Yaoyan, BL53, BL54, BL56, GB30, and GB29. Painful Ashi points in the Gluteus medius and Tensor Fasciae latae muscles on the left which elicited intense pain down the back of her leg to GB40. Straight leg raise test was positive (Epstein, 2008).

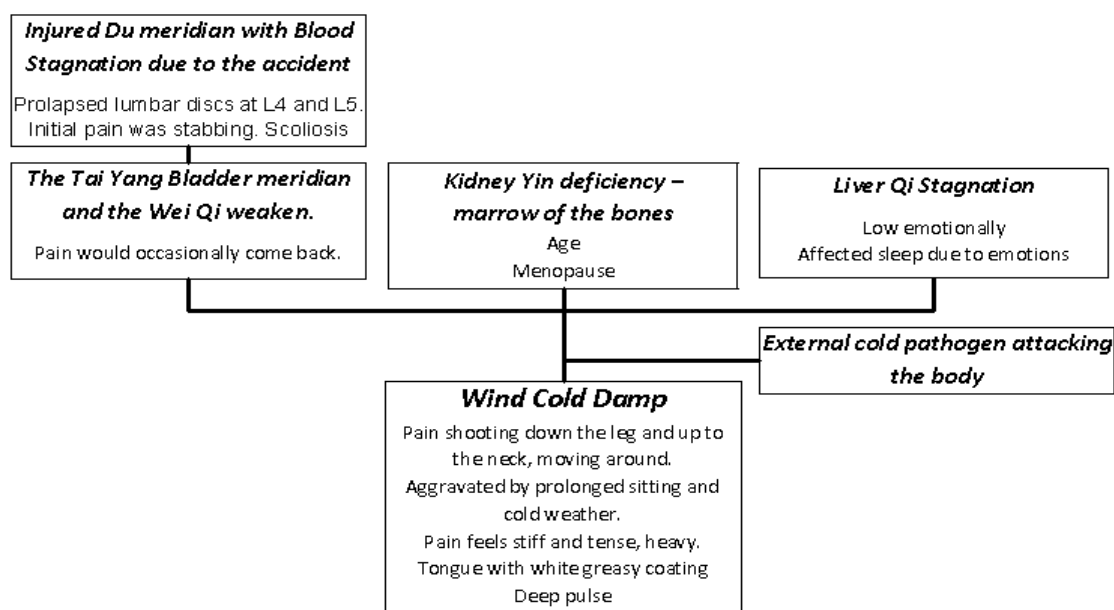
TCM Diagnosis and Syndrome Differentiation

Yao Tong (Lumbago / Lower Backache) - Wind Cold-Damp invading the channels.

Explanation of TCM diagnosis

The patient's Yao Tong condition has a long history and it started from the accident that resulted in the prolapsed discs. Following this injury the Governing Vessel (DU meridian) has been weakened. Intimately connected to Tai Yang and Wei Qi, the impaired Du meridian can no longer help the other systems and problems can easily arise along the course of the channel sinew which became prone to repeated invasions of pathogenic factors. From this, the invasion of Wind- Cold can lead to a stagnation of Qi in the Bladder and Gallbladder meridians (Maciocia, 2008). Long term stagnation can lead to Liver and Kidney depletion. In close connection with these two organs is the Spleen, which produces and transforms the Blood and Qi. In this case due to prolonged stagnation and depletion of the two organs, the Spleen is not able to maintain her initial functions and as a result produces Dampness. Although the patient does not have many symptoms of this, the teeth marks and pale tongue constitute an initial sign of Spleen involvement.

The following chart summarizes the mechanism and the symptoms that demonstrate the diagnosis.



Principle of Treatment

Expel the cold pathogen, drain Dampness, warm the channel sinews, activate Qi and Blood circulation and stop the pain.

Base Formulae

Yuan Hu Zhi Tong Wan (Yan Hu Suo, Bai Zhi),
Du Huo Ji Sheng Tang

Prescription

Zhi Gan Cao 6g	Xi Xin 6g	Fang Feng 6g
Bai Shao Yao 6g	Niu xi 6g	Du Zhong 6g

Chuan Xiong 6g	Dang Gui 6g	Qin Jiao 6g
Sheng Di Huang 6g	Ren Shen 6g	Rou Gui 6g
Sang Ji Sheng 6g	Fu Ling 6g	Du Huo 9g

Administration

Decoction – 1 dose per day for 1 week.

Dang Shen usually replaces Ren Shen, increasing the dosage to 12g (Bensky, 1990; Chen and Chen, 2004)

Modern research has found in Asarum species aristolochic acid which is linked with kidney damage and cancer (Hsieh et al., 2010). As a result of this, Xi Xin, Asarum sieboldii, has been banned in many countries in

the EU (Martena et al., 2007). For medical safety Xi Xin can be removed from this formula (Jennes and Flaws, 2004).

Yuan Hu Zhi Tong Wan – 4-6 pills for 2-3 times a day for 1 week (Chen and Chen, 2004).

Course of Treatment

2nd consultation: 17/ 11/ 2011. The pain decreased in intensity but is still present in the lower back and radiates more to the left leg, sleep has not improved, there are no other complaints.

Tongue is red with teeth marks and white sticky coating on the back.

Thready pulse.

As the symptoms began to ameliorate, Du Huo Ji Sheng Tang will be kept until the following visit, to maintained achieved effects.

3rd consultation: 24 / 11/ 2011. The pain has diminished significantly and does not radiate anymore. Sleeping is still bad. The patient feels more thirsty and hot.

Tongue is red with teeth marks, thin white coating.

Pulse: thready and a little rapid.

The patient left for a holiday and as a result of this she took a month supply of Du Huo Ji Sheng Tang till the next session. She was advised that new symptoms could appear and that she needed a new herbal prescription that will match her new described condition.

Prognosis

The symptoms of the patient have improved, having positive results for her physical health she can continue with the Du Huo Ji Sheng Tang for a month with the supply already provided. As the wind cold-damp symptoms tend to not have an impact anymore on the patient wellbeing, new symptoms that will reveal the underling Liver and Kidney depletion can appear. As a result, new modifications to her prescription will need to be done. As her condition could show more of a Kidney Yin deficiency, modified Liu Wei Di Huang Tang can become part of her prescription.

Modified Liu Wei Di Huang Wan

<i>Shu Di Huang 24g</i>	<i>Shan Yao 12g</i>	<i>Fu Ling 9g</i>
<i>Shan Zhu Yu 12g</i>	<i>Ze Xie 9g</i>	<i>Bai Shao 9g</i>
<i>Mu Dan Pi 9g</i>	<i>Dang Gui 9g</i>	

The first three herbs are used as tonics to invigorate the Yin of Kidney, Liver and Spleen. The other three purgatives clear together heat and Bai Shao, Dangui nourish and enrich Blood (Chen and Chen, 2009).

Discussion

For an injury that caused a chronic lumbago with acute onset pain, it was necessary for a prescription that would have dealt with the new developed symptoms, as well as target the root of the patient's medical issue.

Traditionally used as a Wind-Damp-Cold dispelling formula, Du Huo Ji Sheng Tang (DJT), together with Yuan Hu Zhi Tong Wan, Qi stagnation and Blood stasis pills, would provide the appropriate prescription for the patient.

In TCM, it is considered a key principle to consult and always to adjust the treatment according to the patient's particular syndromes and illness variations (Chen and Chen, 2009). In this case, the prescription was little changed. The patient has complied very well with the prescribed medication and has had positive results. As a consequence of this, the medicine matched the patient's need and it validated the given diagnosis.

For the wind-cold symptoms like pain moving around, shooting down the leg or up to the neck, Du huo, Fang Feng, Qin Jiao, Sang Ji Sheng were used in the patient's prescription to dispel wind- cold, damp and to relieve the pain. For tonifying the Liver and Kidney, to strengthen the bones and tendons, Du zhong and Niu xi were used. They also helped with improving her low mood that was causing lack of sleep and for her Kidney Yin deficiency. Dang Sheng, Fuling, Zhi Gan Cao tonify her Qi and strengthen the Spleen. Although her injury is quite old, there is still some stasis that blocking the sinews channels. As a result of this, Yan Hu Suo, Bai Zhi, Rou Gui are used for removing Blood Stasis and Qi stagnation, meanwhile Dang Gui, Chuan Xiong, Sheng Di Huang, Bai Shao Yao nourish and invigorate the blood.

According to Shih et al., 2012 cohort studies of randomly sampled cases from Taiwan National Health Insurance Research Database have proved that the most frequently prescribed formula for treating osteoporosis has been Du Huo Ji Sheng Tang. Despite this fact, unfortunately there are still few controlled trials in English and even fewer free articles available, which narrow down its popularity in the Western medical world.

In TCM, osteoarthritis is a combination of Wei and Bi Syndrome, which is in quite close relationship with the TCM diagnosis given to the patient.

A clinical trial in Taipei from 2005, 68 patients with osteoarthritis in the knee where treated with DJT for 4 weeks (Lai et al., 2007). The results of this piece of research was that the given formula reduced pain and stiffness, improved physical functioning, but it was less affective in treating aversion to cold and flaccidity.

In vivo experiments, on osteoarthritis rabbits the significant therapeutic effect of Du Huo Ji Sheng Tang was associated with inhibition of VEGF and HIF-1alpha expression (Chen et al., 2009).

Hayashi et al., 2007 have experimented on a dog with intervertebral disk disease at C3-C4 and dorsal extradural compression at C1-C2 and C3-C4 with electro-acupuncture and DJT. The motor rehabilitation of the dog was accomplished and there were no recurrent symptoms. This demonstrated that the formula can have very good results in resolving musculoskeletal problems.

Trying to find the answer for the specific component that can provide pain free results in the prescribed formula of the patient, Wei et al., 1999 have evaluate the effects of Du Huo and Yan Hu Suo on a rat model of inflammatory hyperalgesia. The outcome of this research was that Du Huo is an effective herbal agent in attenuating persistent inflammation and hyperalgesia in rats.

Conclusion

The patient has had good result of the herbal

prescription that was given to her. The few reports and studies available do not provide sufficient scientific based evidence to demonstrate the effectiveness of Du Huo Ji Sheng Tang and Yuan Hu Zhi Tong Wan.

Further prospective controlled investigations in Chinese herbal medicine in the management of disease is needed to more accurately state, like is been in the case of this clinical study, that herbal prescriptions can produce increasingly significance improvement to the patient's lower back recovery.

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Journal of Chinese Medicine and Acupuncture

Official academic journal of the ATCM

Call for Papers

"The Journal of Chinese Medicine and Acupuncture" (JCMA) is a bilingual TCM academic magazine, which is published twice annually in March and September. It is intended as a platform and a forum, where the journal concerning the profession can be developed, debated and enhanced from the greatest variety of perspectives. All of ATCM members, other TCM professionals and members of public are welcomed and invited to contribute papers for publication. The journal may feature articles on various topics, which including clinical experience, case studies, theory and literature, education and development, book reviews and research reports etc.

Papers should be in Chinese or English, but preferably bilingual, with up to 5000 words in Chinese or 4000 words in English. An abstract of 150-200 words should also be attached. The article must comply with the following format: Title, Author, Abstract, Key Words, Introduction, Text, Summary/Discussion or Conclusion and References. Each article may also be accompanied by a short biography on a separate page.

All the submitted articles or papers must not be simultaneously submitted to other journals, and also have not been published in any other journals unless particularly specified. Submitted articles are reviewed by our editors. If the editors suggest any significant changes to the article, their comments and suggestions will be passed on to the authors for approval and/or alteration. JCMA maintains copyright over published articles. Unpublished articles will not be returned unless specifically arranged with the editors.

All the papers should be sent to the Editorial Committee via email info@atcm.co.uk. Please indicate "Paper for JCMA".

Deadline of submission for next Issue (Volume 21 Issue 2) is **10th August 2014**.

Papers received after the deadline may still be considered for publication, but in the later issue.

Guideline of English standard for authors

- (1) Please run a spell check on your computer before submitting.
- (2) Only use sentences (NOT fragments) containing a subject, verb and object.
- (3) Avoid long and confusing sentences with commas and semicolons.
- (4) Double check that you use the proper tense. We would recommend to write case histories in past tense. eg, the patient had... (NOT is...)
- (5) Use appropriate punctuation, there should be a space following a comma or full stop.
- (6) Avoid phrases that are difficult to express or translate in another language, or explain them properly.
- (7) Use standard and unified measures, eg, minutes (NOT mins), hours (NOT hrs) etc.
- (8) All herbal names should have their proper Pin Yin and Latin name, and the measures of dosage must be followed, eg, Shan Yao 10g (NOT 10).
- (9) All acupuncture points need to be named according to convention (Ki 7, Taixi).
- (10) Illustrations/references from other sources should be numbered with a bracket, eg, ^{[1][2][3]}.
- (11) Referencing should be Harvard. Please ensure all dates and publishers' details are correct.

It should comply with the format as following:

Books: Author (year), Title. City: Publisher. Eg, Lewis R. (2004), The Infertility Cure. London: Little, Brown and Company.

Articles: Author (year), Title. Journal, Volume (Issue), pages. eg, Lei Chen (2003). Prevalence of metabolic syndrome among Shanghai adults in China. Chinese Journal of Cardiology, 31 (12), 909-912.

关于国际中医药专业技术职称评审介绍

张恩勤

英国中医学院

国际中医药专业技术职称评审,是世界中医药学会联合会(简称“世界中联”)的重要职责之一。为规范国际中医医师管理,世界中联于2011年5月1日发布了【国际中医医师专业技术职称分级标准】(简称【分级标准】);进而以【分级标准】为纲,制定了【国际中医药专业技术职称考试评审办法】(简称【办法】);又依此【办法】为准,于2011年8月8日颁布了【国际中医医师职称考试(评审)实施方案】、国际中医药教师职称考试(评审)实施方案和【国际西学中医师高级职称考试(评审)实施方案】三个最新配套文件。

本人受世界中联资格考试部委托,负责在英国及其周边国家的中医药人员的报名和咨询工作。因篇幅关系,今仅将申报主任医师的有关要求和程序等,简述如下。

一、学历和临床年限要求

1. 中医中专(3年制),临床实践21年。
2. 中医大专(3年制),临床实践19年。
3. 中医本科,临床实践16年。
4. 中医临床硕士,临床实践12年。
5. 中医临床博士,临床实践7年。
6. 家传、师承、自学,临床实践30年,或3,000学时,临床实践25年。
7. 非医学专业本科,2500学时,临床实践16年。
8. 取得前一级资格,临床实践5年者。

二、专业知识与临床技能要求

1. 精通中医药学知识。
2. 精读至少一部中医经典著作,并有相关论文发表。
3. 精通各家学说主要思想,并能正确运用到临床实践。
4. 精通本专科中医临床知识技能,具有对本专科疑难病症、危急重症进行正确辨治能力。
5. 精通与本专业相关的现代医学基础、临床知识,全面掌握综合临床技能。
6. 全面跟踪并掌握本专科学术进展,具有正确引进、应用、组织推广新技术、新疗法的能力。熟练掌握急诊急救知识与操作技能。
7. 掌握所在国家相关法律法规,具有医务人员应具有医德理念。
8. 精通中医科研选题、课题设计及各类研究方法。
9. 具有指导下级中医药人员开展具有高难度科研工作能力、授课与临床带教能力。
10. 近5年,在具有一定权威性期刊或重要学术会议上发表学术论文,至少2篇。发表高水平的综述,或者主编/参编/翻译本科相关著作,至少1部。

三、评审方式

- 1) 同行专家对论文、有效病案等资料进行评审,签署评价意见。
- 2) 评审专家委员会主持现场答辩。

四、评审地点

1. 高级职称评审,答辩现场设在中国北京。在规定的的时间和地点进行现场论文答辩。
2. 所在国家获得正高级职称的人数超过10人,报名人数超过5人,可就近设立答辩现场。

五、提交资料

须在实施评审前3个月,提交以下资料:

- 1) 【国际中医药专业高级职称评审申请表】;
- 2) 学历证书复印件;
- 3) 从业执照复印件;
- 4) 中医药学术团体或医疗机构推荐信;
- 5) 在专业期刊杂志或国际专业学术会议上发表的论文2篇(非中文撰写者请提供中文译稿);
- 6) 临床治疗两个以上中医病证、至少五个不同证型的有效病案至少10个(非中文撰写者提供中文译稿);
- 7) 兼职从事教学、科研工作者,提交专著、教材。译著内封复印件。
- 8) 有中医专著、教材、译著者,提供其内封复印件。
- 9) 提供学习、运用、研究中医经典(黄帝内经、伤寒论、金匮要略、温病条辨,任选其一)的心得一篇;提交1篇关于本学科领域学术现状与展望方面的文章一篇。

六、评审结论

1. 评审通过标准

(1) 提交的论文、本人临床治疗的有效病例、科研设计或成果等资料,经专家评审,认为达到了申报职称级别应用的水平;

(2) 学习并临床运用中医经典的心得,本学科领域学术现状与展望方面的撰文及其他论文,经专家评审,认为达到申报职称级别应有的水平;

(3) 现场答辩,专家确认达到了申报职称级别应用的水平。

2. 达到以上三条,为评审通过。可获得申报级别的技术职称。

七、颁发证书:

- 1) 通过评审者,核发相应级别的职称证书;
- 2) 职称证书,统一由公证部门依法公证。

八、咨询

- 1) 英国,张老师,电话: 078 461 934 88;
 - 2) 中国,孙奇,徐金香,电话: 0086-10-58650053 58650052
- E-mail: ied_wfcms@126.com

Introduction to the International Professional Title Assessment for Chinese Medicine Practitioners

Engin Can

UK Academy of Chinese Medicine

World examination (assessment) of Chinese medicine is an important work of World Federation of Chinese Medicine Societies (hereinafter referred to as WFCMS). In order to regulate the administration of world Chinese medicine doctors, WFCMS released the World Classification Standard for Professional Title of Chinese Medicine Doctors (hereinafter referred to as Classification Standard) on May 1st 2011. Based on the Classification Standard, WFCMS formulated World Examination (Assessment) Measures for Professional Title of Chinese Medicine (hereinafter referred to as Measures). In accordance with the Measures, WFCMS released the following three documents on August 8th, 2011: Action Plan for World Examination (Assessment) for Professional Title of Doctors of Chinese Medicine; Action Plan for World Examination (Assessment) for Professional Titles of Teachers of Chinese Medicine and Action Plan for World Examination (Assessment) for Senior Professional Title of Doctor of western medicine learning TCM.

I was commissioned by the Qualification Examination Department of WFCMS to organize the TCM workers in the UK and neighboring countries to participate in the International Chinese Medicine Professional Title Assessment held by World Federation of Chinese Medicine Societies. The main work is participants' registration, qualification check and assessment.

Requirements of the Chief Physician are summarized as follows:

1. Requirements for education background and experience of medical practice

- 1) Technical secondary school graduate majored in Chinese medicine (3 years), with at least 21 years of clinical practice.
- 2) Junior college graduate majored in Chinese medicine (3 years), with at least 19 years of clinical practice.
- 3) Undergraduate majored in Chinese medicine, with at least 16 years of clinical practice.
- 4) Postgraduate majored in clinical Chinese Medicine, with at least 12 years of clinical practice.
- 5) Doctor degree of clinical Chinese medicine, with at least 7 years of clinical practice.
- 6) To Learn Chinese medicine from its family, or a master or by self-study and work as Chinese medicine practitioner for at least 30 years; or work as Chinese medicine practitioner for at least 25 years with professional training in Chinese medicine accumulated for at least 3000 credit hours
- 7) Undergraduate degree not majored in medicine but with professional training in Chinese medicine accumulated for at least 2500 credit hours and at least 16 years of clinical practice.
- 8) Qualify as former level, 5 years of clinical practice

2. Requirements for professional knowledge and clinical skills

- 1) Proficient with knowledge of Chinese medicine.
- 2) To intensively read at least 1 piece of Chinese medicine classics and to publish relevant
- 3) Proficient at main academic thoughts of different schools and able to correctly apply them in clinical practice.
- 4) Proficient at the clinical knowledge and skills of the

specialty, and capable of correctly conduct syndrome differentiation on complicated, severe and difficult diseases.

- 5) Proficient at basic theories, clinical knowledge and skills of modern medicine relevant to the specialty; to thoroughly master general clinical skills.
- 6) To update with and thoroughly master the academic development of the specialty, and capable of introducing, applying, organizing the promotion of new technologies and therapies. To proficiently master knowledge and basic skills of emergency and first aid.
- 7) To master relevant laws and regulations of its country and possess required code of ethics and beliefs.
- 8) Proficient with the topic-selection, designing and methodologies of Chinese medicine clinical research projects.
- 9) Capable of instructing junior Chinese medicine professionals to conduct difficult scientific researches. Possess great capability of clinical teaching as well as experiences in teaching.

10) In recent five years, to publish at least two essays at authorized journals or important academic conferences. To publish at least one literature review of high level; or have been chief editor, or editor or translator of at least 1 book in relevant specialty.

3. Assessment Method

- 1) Expert signed evaluation after review the paper and effective medical record.
- 2) Expert evaluation commission presided at scene reply.

4. Assessment locale

- 1) Assessment of International Chinese Medicine Professional Titles based in China. It should scene reply within a set time and locale.
- 2) The countries (regions) could set up nearly when the applicants reach a certain level and quantity. (Number of senior title more than 10 and the number of registration more than 5).

5. Documents Submission

Following documents should be submitted before the assessment 3 months:

- 4) Application Form of World Examination (Assessment) for Professional Titles of Chinese Medicine
- 5) Copy of educational background certification.
- 6) Copy of Practice license
- 7) Recommendation Letter of Academy Board of TCM or Medical Institution.
- 8) 2 articles on Professional Journal or International Professional Academy Meetings (Chinese version is necessary).
- 9) Effective medical records including no less than 2 TCM Disease Category and 10 effective cases with 5 different Syndromes types of TCM (Chinese version is necessary).

(turn to page 31)

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HENAN UNIVERSITY OF TRADITIONAL CHINESE MEDICINE

河南中医学院

Founded in 1958, Henan University of Traditional Chinese Medicine was located in Zhengzhou the capital city of Henan province with over 18000 students. It consists of 16 schools (departments or centers), 3 affiliated hospitals (all at provincial level), 125 clinical bases, 59 research institutes, 24 priority disciplines and 6 key specialties nominated by the State Administration of TCM. The university has established friendly relationship with over 50 educational, research, and medical institutions worldwide.

The School of International Education offers Bachelor's, Master's, Doctoral programs as well as Chinese Language programs and short-term trainings. It was awarded by the China Association of Higher Education for excellence in international education. It was the only TCM university competing in the final of "China Exploration 2013" a sports and cultural competition for international students in China. In September 2013, the university was approved by the Ministry of Education Department of International Cooperation and Exchanges to enroll Chinese Government Scholarship applicants. The website for the online application system is <http://laihua.csc.edu.cn>. Applicants are expected to submit their applications between January and early April. For more information, please log onto <http://www.csc.edu.cn/laihua/scholarshipdetailen.aspx?cid=97&id=2070>.

河南中医学院始建于1958年，位于河南省会郑州市。下辖16个院（部、中心），3所直属附属医院（均为省级医院）和125个临床教学基地，59个研究所。学校有国家中医药管理局重点学科24个、重点专科6个，在校生18000多人。学校与国外50多个教育、科研和医疗机构建立了联合办学、技术合作等长期友好关系。

河南中医学院国际教育学院负责留学本科生、硕士研究生、博士研究生、汉语和进修生的教学。曾被中国教育部高等教育学会评为“来华留学生教育管理先进集体”。2013年在中国教育部主办的“留动中国——在华留学生阳光运动文化之旅”活动中，河南中医学院为晋级全国总决赛的唯一一所中医药院校。2013年9月，学校获批成为承担中国政府奖学金生培养任务院校。中国政府奖学金网上报名平台网址：<http://laihua.csc.edu.cn>，申请时间通常为每年的1-4月。详情请登录<http://www.csc.edu.cn/laihua/scholarshipdetailen.aspx?cid=97&id=2070>。

Henan ---- the cradle of Chinese civilization

- ☆ 3 out of 7 ancient capitals in China were located in Henan;
- ☆ 3 properties were enlisted as the World Cultural Heritage: Yin Ruins—where oracle bone inscriptions were excavated; Songshan Mountain—origin of Shaolin kungfu; Longmen Grottoes—where *Hetu* and *Luoshu* (The River Chart and the Inscription of the Luo) came into being;
- ☆ Henan is the roots of Chinese medicine and birthplace of ZHANG ZHONGJING the writer of the *Treatise on Febrile and Miscellaneous Diseases*; Henan is where Taijiquan originated.



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