# THE EXTRAORDINARY VESSELS & GYNAECOLOGICAL DISEASES

# by Zhenbo Li

The extraordinary vessels are channels with irregularly distributed pathways. Their relation with the internal organs is indirect, and they do not have an exterior-interior relationship with one another. However this is no way diminishes the importance of the extraordinary vessels. They help to strengthen the connections between the twelve ordinary channels, act as a reservoir to regulate qi and blood throughout the body, and have an especially close relationship to the Liver, Kidneys and uterus. Because of their association with women's physiology, the eight extraordinary vessels, especially the Penetrating vessel (Chong mai), Conception vessel (Ren mai), Governing vessel (Du mai) and Girdle vessel (Dai mai), are extremely useful in the pathology, differentiation and treatment of gynaecological disorders. Regulating the extraordinary vessels using acupuncture and Chinese herbs to treat gynaecological conditions can yield highly effective results.

#### Penetrating vessel (Chong mai)

The Penetrating vessel influences the supply and proper circulation of blood in the uterus, thereby controlling the cycle-length, quantity, quality, duration and coloration of menstruation. The Penetrating vessel acts as a reservoir for the blood, and is referred to as the "sea of blood."

In women, the Penetrating vessel originates inside the uterus and descends to Huiyin REN-1. From Huiyin REN-1 one branch emerges at Qichong ST-30 and then flows with the Kidney channel from Henggu KID-11 to Youmen KID-21. Qichong ST-30 belongs to the foot yangming channel which is rich in qi and blood, whilst the Kidneys store jing (essence) which is also an important source of blood. The Penetrating vessel's pathway flows upwards, connecting these two blood-rich channels. This characteristic makes it possible for the Penetrating vessel to serve as a reservoir for blood, counterbalancing excessive or deficient blood supply to the uterus, and thus regulating menstruation. The Su Wen says: "In women, at 14 years of age the tiankui [dew of heaven] comes into play, strong circulation of the Conception vessel occurs, the Penetrating vessel is flourishing, the menses come at regular intervals and reproduction becomes possible. At 49, the Conception vessel becomes deficient and the Penetrating vessel is depleted, the *tiankui* dries up, menstruation stops and she can no longer conceive." Acting as the "sea of blood," this vessel is of foremost importance in the menstrual function.

Acupuncture and herbs that regulate the uterus, and nourish and move the blood can be used to treat menstrual disorders, including painful, irregular, abnormally light or heavy periods, pre-menstrual syndrome and amenorrhoea. Although the Penetrating vessel does not have its own specifically designated acupuncture points, it connects directly with the Stomach and Kidney channels, so points on these channels can be used to regulate the function of Penetrating vessel. The most frequently used points are Gongsun SP-4 and Neiguan P-6, which are the opening and associated points of the Penetrating vessel respectively. Dahe KID-12, Qixue KID-13, Siman KID-14 and Zhongzhu KID-15 as local points are also often used for menstrual problems.

Certain Chinese herbs affect the Penetrating vessel by either i. strengthening the Penetrating vessel, or ii. regulating its qi. The former include Gui Ban (Plastrum Testudinis), Bie Jia (Carapax Amydae Sinensis), E Jiao (Gelatinum Asini), Zi He Che (Placenta Hominis), Zhi Mu (Radix Anemarrhenae Asphodeloidis), Xuan Shen (Radix Scrophulariae Ningpoensis), Huang Bai (Cortex Phellodendri), Sheng Di Huang (Radix Rehmanniae Glutinosae) and Gou Qi Zi (Fructus Lycii Chinensis). The latter include Yan Hu Suo (Rhizoma Corydalis Yanhusuo), Chuan Lian Zi (Fructus Meliae Toosendan), Xiang Fu (Rhizoma Cyperi Rotundi), Yu Jin (Tuber Curcumae), Qing Pi (Pericarpium Citri Reticulatae Viride) and Xiao Hui Xiang (Fructus Foeniculi Vulgaris).

The Penetrating vessel not only influences menstruation, but can also affect other common disorders in women. Morning sickness for example, results from rebellious qi in the Penetrating vessel. During pregnancy, especially the first three months, profound changes to the Penetrating vessel take place. The mother's blood, essence and Kidney energy are diverted to nourish the foetus, so qi and blood

become relatively deficient in the Penetrating vessel and its qi rebels upwards towards the Stomach and chest. For this reason, acupuncture points and Chinese herbs which affect the Penetrating vessel are also effective for easing morning sickness in pregnant women. Commonly used points include Qichong ST-30, Huangshu KID-16, Shangqu KID-17, Shiguan KID-18 and Yindu KID-19, whilst the most important points are Futonggu KID-20 and Youmen KID-21. The Chinese herbs for subduing rebellious Penetrating vessel qi that are used to stop morning sickness include Mu Xiang (Radix Saussureae seu Vladimirae), Sha Ren (Fructus seu Semen Amomi), Chen Pi (Pericarpium Citri Reticulatae) and Su Ye (Folium Perillae Frutescentis).

#### Case History

A 42 year old patient had late periods for three consecutive months. Her menstrual bleeding was pale red in colour, thin in quality, scanty and without clots. She had had a digestive problem for three years with reduced appetite, fullness and copious abdominal gas, alternating constipation and diarrhoea, and a pale tongue with a thin white, slightly greasy tongue coating. This diagnosis was delayed menstruation. The differentiation was Spleen deficiency, which caused qi and blood deficiency and emptiness of the Penetrating vessel, resulting in delayed periods. Acupuncture points used were Gongsun SP-4, Neiguan P-6, Zhongwan REN-12, Sanyinjiao SP-6, Zusanli ST-36 and Qixue KID-13, with treatment given twice a week, starting after menstruation. The herbal prescription was Ba Zhen Tang (Eight-Treasure Decoction) plus E Jiao (Gelatinum Asini) and Gou Qi Zi (Fructus Lycii Chinensis), one bag to be taken every two days. After three weeks of treatment, her period came on time (and was subsequently regular), and there was a great improvement in digestive function. Gongsun SP-4 and Neiguan P-6 are the opening and associated points of the Penetrating vessel, able to regulate its function; Qixue KID-13 is a point of the Penetrating vessel; Zhongwan REN-12, Sanyinjiao SP-6 and Zusanli ST-36 strengthen the Spleen which generates qi and blood. All these points combine together to regulate the Penetrating vessel and strengthen the Spleen, generate blood and regulate menstruation. *Ba Zhen Tang* (Eight-Treasure Decoction) is a formula which tonifies qi and blood; E Jiao and Gou Qi Zi tonify blood and are the herbs that strengthen the Penetrating vessel.

# Conception vessel (Ren mai)

The Conception vessel is very closely related to the uterus and to the female reproductive function. It regulates qi and blood in all the yin channels, helps to regulate menstruation and directs the development and growth of the foetus, making it most important during pregnancy.

The function of the Conception vessel is related to its course. It originates from the uterus in women and emerges at Huiyin REN-1 in the perineum. It runs anteriorly to the pubic region and all the way up to the throat along the midline of the body. From the throat it ascends to curve

around the lips and up to the eyes to meet the Stomach channel at Chengqi ST-1. Along this path, it connects with the yin channels of the hand and foot, and the Yin Linking (Yin Wei) vessel many times. It connects all the yin channels of the human body, combining yin, essence and fluids, and so is called "the sea of yin channels." This means that the Conception vessel provides the yin substances for all female physiological processes, including puberty, conception, pregnancy, childbirth and menopause.

The Conception vessel can be used to nourish the body's yin energy, particularly in women after menopause, and to reduce the effects of empty-heat symptoms deriving from yin deficiency which is a common problem in the menopausal stage. It can also be used for problems relating to menarche, conception, fertility and pregnancy, especially for pregnancy, because the Conception vessel controls the foetus.

Commonly used points relating to the Conception vessel are Lieque LU-7 and Zhaohai KID-6, which are its opening and associated points, Huiyin REN-1, Qugu REN-2 and Shimen REN-5. The most frequently used points are Zhongji REN-3, Guanyuan REN-4 and Qihai REN-6. Zhongji REN-3 and Guanyuan REN-4 are meeting points of the Conception vessel with the Spleen, Liver and Kidney channels. The Spleen is the root of qi and blood, the Liver is responsible for the free flow of qi and stores blood, and the Kidney stores essence and is responsible for reproduction. Qihai REN-6 (Sea of Qi) fosters original qi and tonifies qi. Yinjiao REN-7 (Yin Intersection) is the meeting point of the Conception vessel with the Penetrating vessel and the Kidney channel.

Commonly used herbs for nourishing the Conception vessel are Gui Ban (Plastrum Testudinis), Bie Jia (Carapax Amydae Sinensis), E Jiao (Gelatinum Asini), Zi He Che (Placenta Hominis), Zhi Mu (Radix Anemarrhenae Asphodeloidis), Xuan Shen (Radix Scrophulariae Ningpoensis), Huang Bai (Cortex Phellodendri), Sheng Di Huang (Radix Rehmanniae Glutinosae) and Gou Qi Zi (Fructus Lycii Chinensis), almost the same herbs as those used for nourishing the Penetrating vessel.

#### Case History

A 45 year old female patient had suffered from hot flushes, night sweating and irritability for six months, accompanied by soreness of the lower back, and heavy and irregular periods with red blood which was thick in quality with few clots. Her tongue was red with little coating and her pulse was fine and rapid. She was diagnosed as suffering from menopausal syndrome, differentiated as Kidney yin deficiency with empty heat. Zuo Gui Wan (Restore the Left [Kidney] Pill) plus Gui Ban (Plastrum Testudinis) and Zhi Mu (Radix Anemarrhenae Asphodeloidis) was used, one bag to be taken every two days. Acupuncture points selected were Guanyuan REN-4, Lieque LU-7, Zhaohai KID-6, Sanyinjiao SP-6, Taixi KID-3, Hegu L.I.-4 and Fuliu KID-7. She was treated three times a week. After two weeks of treatment, she felt much better, except for continuing mild night sweats. She continued the same treatment for another

two weeks and her condition was stable, although the night sweats remained. Zhi Bai Di Huang Wan (Anemarrhena, Phellodendron, and Rehmannia Pill) was then prescribed, 3 capsules a day, and acupuncture continued at the same points, twice a week. About three months later, she had no further menopausal symptoms. Zhi Bai Di Huang Wan and Zuo Gui Wanare traditional formulas for nourishing Kidney yin, and the former can also clear empty heat. Gui Ban (Plastrum Testudinis) and Zhi Mu (Radix Anemarrhenae Asphodeloidis) are the herbs which nourish the Conception vessel and clear empty heat. Lieque LU-7 and Zhaohai KID-6 are the opening and associated points of the Conception vessel respectively; Guanyuan REN-4 tonifies the Conception vessel and regulates menstruation; Sanyinjiao SP-6 tonifies the Kidney, Liver and Spleen and regulates menstruation; Taixi KID-3 is the yuan-source point of the Kidney channel and nourishes the Kidney; Fuliu KID-7 warms Kidney yang and regulates water metabolism, combining with Hegu L.I.-4 to relieve night sweating. All the points used together tonify the Kidney, regulate the Conception vessel and treat menopausal syndrome.

# Governing vessel (Du mai)

The Governing vessel also originates in the uterus and descends to Huiyin REN-1. This is common to all three of the Governing, Conception and Penetrating vessels, which is why Li Shi-zhen calls them "three branches of one vessel". The Governing vessel primary pathway runs posteriorly along the midline of the sacrum, its first branch curls around the vagina and the interior of the spinal column and enters the Kidneys, and its abdominal (second) branch ascends the midline of the abdomen and has an influence on the genital system in women.

Certain points of the Governing vessel are commonly used for gynaecological diseases. The opening and associated points, Houxi SI-3 and Shenmai BL-62 respectively, are commonly used points for regulating qi in the vessel. Mingmen DU-4 is very good for warming Kidney yang. Some herbs like Fu Zi (Radix Aconiti Carmichaeli Praeparatae), Rou Gui (Cortex Cinnamomi Cassiae), Gan Jiang (Rhizoma Zingiberis Officinalis), Chuan Jiao (Pericarpium Zanthoxyli) and Gui Zhi (Ramulus Cinnamomi Cassiae) possess heating qualities that are in keeping with the Governing vessel's yang nature.

## Case History

A 34 year old woman in her 31st week of pregnancy, suddenly for no apparent reason felt contraction of her uterus, lower abdominal pain, dull pain and soreness in the lower back that was also occasionally sharp in nature, and excessive thin white odourless vaginal discharge. There was no vaginal bleeding. The tongue was pale red with little coating, and the pulse was slippery and fine; the chi (root) positions of the pulse were weak. She went to the hospital and was diagnosed with pretern labour. The Chinese medicine diagnosis was "restless foetus", differentiated as

Kidney qi deficiency. Shou Tai Wan (Foetus Longevity Pill) with the addition of Dang Shen (Radix Codonopsis Pilosulae) and Bai Zhu (Rhizoma Atractylodis Macrocephalae) was prescribed, one bag to be taken every two days. The acupuncture points chosen were Baihui DU-20, Zusanli ST-36, Houxi SI-3, Shenmai BL-62, Zhaohai KID-6, Lieque LU-7 and Taixi KID-3. After one acupuncture treatment and one bag of the formula, she felt better. I gave her a second treatment using the same formula and acupuncture points. Three days later, she reported no further pain in the abdomen, with only slight remaining soreness in her lower back. However there was redness at the tip of her tongue which indicated the presence of heat, so this time I added Huang Qin (Radix Scutellariae Baicalensis) to the formula and used the same points. She recovered after three acupuncture treatments and three doses of the formula, and at her due date she bore a healthy baby. This case is restless foetus caused by Kidney qi deficiency. Shou Tai Wan (Foetus Longevity Pill) is a formula for consolidating Kidney qi. Dang Shen (Radix Codonopsis Pilosulae) and Bai Zhu (Rhizoma Atractylodis Macrocephalae) were added to tonify the Spleen and dry dampness in order to treat the excessive vaginal discharge. Because of her red tongue tip showing heat, Huang Qin was added to the formula, especially because Huang Qin and Bai Zhu in combination are very good at calming the foetus. Baihui DU-20 raises qi for treating restless foetus; Lieque LU-7 and Zhaohai KID-6, the opening and associated points, can consolidate the Conception vessel and treat restless foetus. Houxi SI-3 and Shenmai BL-62 are the opening and associated points of the Governing vessel, which can strengthen the bones and spinal column to relieve lower back pain; Zusanli ST-36 strengthens the Spleen to astringe the leucorrhoea, Taixi KID-3 tonifies Kidney qi. Together the points consolidate the Conception and Governing vessels, tonify the Kidney and strengthen the Spleen.

## Girdle vessel (Dai mai)

The Girdle vessel is the only horizontal vessel of the body. It originates in the region of Zhangmen LIV-13 and encircles the waist like a belt passing through Daimai GB-26, Wushu GB-27 and Weidao GB-28. The Girdle vessel encircles and influences all the channels in a longitudinal direction, and directly affects female physiology and pathology.

Zhangmen LIV-13 belongs to the Liver channel and is the front-mu point of the Spleen. The smooth flow of Liver qi is very important in gynaecological physiology and pathology. It regulates the ascending and descending of the Spleen and Kidneys, both important zang in gynaecology, because it encircles their channels.

The Kidney's functions of storing essence and lowering and holding qi, the Spleen's function of raising qi, and the Liver's function of smoothing the flow of qi all rely on the Girdle vessel's encircling of the body. Impairment of the Girdle vessel's function can lead to a decline in the Spleen's ability to transform and transport food and drink,

contributing to dampness which may infuse downwards and cause excessive vaginal discharge. Deficiency of the Girdle vessel results in the sinking of Spleen qi, which can induce a prolapse of the uterus. The foetus depends not only on the Kidneys and the Conception vessel, but also on the Girdle vessel. If the Girdle vessel is slack, it fails to restrain essence, causing an unstable foetus, and the mother may have vaginal bleeding during pregnancy, a restless foetus or even miscarriage.

The Girdle vessel can be used in gynaecology to treat irregular periods, painful periods (dysmenorrhoea) and excessive vaginal discharge. The opening and associated points of the Girdle vessel, Zulinqi GB-41 and Waiguan SJ-5 respectively, are commonly used for excessive vaginal discharge. The points along the Girdle vessel's trajectory, Daimai GB-26, Wushu GB-27, Weidao GB-28 and Zhangmen LIV-13 can also regulate its function.

Sheng Ma (Rhizoma Cimicifugae) affects the Girdle vessel, has an ascending movement, and can be used to treat pathological conditions of the Girdle vessel. Certain astringent herbs will enter the Girdle vessel, including Wu Wei Zi (Fructus Schisandrae Chinensis), Shan Yao (Radix Dioscoreae Oppositae), Qian Shi (Semen Euryales Ferox), Fu Pen Zi (Fructus Rubi), Sang Piao Xiao (Ootheca Mantidis), Dang Gui (Radix Angelicae Sinensis), Bai Shao (Radix Paeoniae Lactiflorae), Xu Duan (Radix Dipsaci), Long Gu (Os Draconis), Ai Ye (Folium Artemisiae) and Gan Cao (Radix Glycyrrhizae Uralensis).

# Case History

A 34 year old woman had suffered from excessive vaginal discharge for four months. The discharge was white, occasionally slightly yellow in colour, thick in quality and odourless. She had a bearing-down sensation in the vagina, a sallow complexion, cold limbs, oedema of the medial aspect of the ankles, lassitude and loose stools. The tongue was pale with a thin white greasy tongue coating and she had a soggy and weak pulse. She was examined by a gynaecologist, and no positive signs were found. The diagnosis was deficiency and sinking of Spleen qi. Wan Dai Tang (End Discharge Decoction) was used with the addition of Sheng Ma (Rhizoma Cimicifugae) and Long Gu (Os Draconis). Acupuncture at Waiguan SJ-5, Zulinqi GB-41, Baihui DU-20, Qihai REN-6, Ciliao BL-32, Yinlingquan SP-9, Sanyinjiao SP-6 and Zusanli ST-36 was administrated twice a week. After one week of treatment, the patient felt much better. Three weeks later, she recovered totally. Wan Dai Tang is a formula which treats the Spleen qi deficiency pattern of leucorrhoea; Sheng Ma directs the flow of Spleen qi upward, and Long Gu consolidates the Girdle vessel and astringes the leucorrhoea. Waiguan SJ-5 and Zulinqi GB-41 are the opening and associated points of the Girdle vessel, and can consolidate the Girdle vessel and stop leucorrhoea; Yinlingquan SP-9, Sanyinjiao SP-6 and Zusanli ST-36 strengthen Spleen qi and eliminate dampness; Baihui DU-20 and Qihai REN-6 ascend Spleen qi; Daimai GB-26 connects with the Girdle vessel and is an important point for treating leucorrhoea; Ciliao BL-32, as a local point, is very good for problems in the pelvic area. All the points used together consolidate the Girdle vessel, strengthen the Spleen, raise Spleen qi and stop leucorrhoea.

Zhenbo Li received her M.D. in Chinese medicine from Shangdong College of Traditional Chinese Medicine in 1986 and her Ph.D. in Chinese medicine from Guangzhou University of Traditional Chinese Medicine in 1998. She has worked as an associate professor in the Internal Medicine Department of the Affiliated Hospital of Guangzhou University of Traditional Chinese Medicine. Currently as a professor of TCM Gynaecology and Internal Medicine and a practising acupuncturist, she teaches and practices at the American Academy of Acupuncture and Oriental Medicine in Minnesota.