

A literature review of the treatment of Polycystic Ovary Syndrome

Introduction:

A search was made on the treatment of polycystic ovary syndrome with Chinese Herbal Medicine via Pub med The National Library of Medicine; six references to related research to polycystic ovary syndrome were found, although some had an indirect link and in Chinese. Another search was made using CISCOM database, one article in English was found. A further search for literature was performed at The University of Westminster Library, which uncovered 4 books containing information on the subject.

This review provides a discussion on the aetiology, pathophysiology and treatment of PCOS using current literature from Western Medicine. This piece of work then goes on to review the aetiology, pathology and treatment of PCOS from a Traditional Chinese Medicine approach.

Western Medicines approach to PCOS

Overview

Polycystic ovary syndrome (PCOS) is one of the most common endocrinopathologies in women of reproductive age. It accounts for 75% of women with anovulatory infertility, 30-49% with secondary amenorrhoea, 85-90% with oligomenorrhoea, 80% with hirsutism, and 30-60% with obesity. Although 60 years have passed since the first description of this syndrome, its definition and diagnostic criteria is still controversial Nestler (1997). According to Stein and Leventhal in 1935 the diagnosis of PCOS was based on the clinical symptoms of oligo/amenorrhoea, infertility, hirsutism, and obesity, in the presence of histological verified polycystic ovaries Franks (1997). Presently it is clear that PCOS is also linked to many different phenotypes examples of which include not only non-hirsute women with oligomenorrhoea or amenorrhoea, but also lean hirsute subjects with regular ovulatory cycles. Whether genetically or nutritionally determined the role of insulin is becoming evident as an important feature in the pathogenesis and subsequent treatment of PCOS in some phenotypes. This recent emphasis suggests that PCOS may no longer be considered purely a gynaecological disorder, as it also encompasses many features of a metabolic syndrome Hopkinson (1998).

Western Medicines Understanding Of The Aetiology Of PCOS

The precise aetiology remains unknown, and likely to be multi factorial. Current theories on aetiology include genetic predisposition as familial clustering's of cases is well recognised (50% of siblings are affected), hence an autosomal dominant mode of inheritance is suggested Legro (1998). There also there appears to be intermediate phenotypes, as well as 50% of first-degree relatives who have insulin intolerance Franks (1997). Other theories favour a complex trait in which a small number of major genes interact with environmental and other genetic factors to account for heterogeneity Waterworth (1997), Gharani (1997). Excessive adrenal androgen production at time of puberty has also been proposed, due to the disorder frequently becoming apparent in adolescence, probably due to an increase in adrenal androgen secretion. However Greenspan (1994 pg 447) suggests central nervous system abnormalities, which lead to an inappropriate secretion of hypothalamic GnRH. Finally fluctuations in carbohydrates associated with bulimia, which was found in ¾

of PCOS patients may facilitate the phenotype expression of PCOS via altered insulin resistance McCluskey et al (1992).

Western Medicines Understanding Of The Pathogenesis Of PCOS

The pathogenesis of PCOS is difficult to ascertain given the many different phenotypes identified within the syndrome and could involve any one of the following mechanisms according to Western bioscience; Abnormal patterns of Luteinizing Hormone (LH) released giving rise to a predominance of LH to Follicular Stimulating Hormone (FSH); Abnormal secretion of androgens by the ovaries, adrenals or both; Excessive ovary inhibition secretion caused by androgens, thereby resulting in the suppression of FSH secretion and defective follicle development Greenspan (1994 pg 427); Defective hepatic synthesis of sex hormone-binding globulin (Shbg) causing abnormal androgen transport in serum; Increased androgens aromatised to oestrogen's which increase pituitary secretion of LH and prolactin Leordines (1998); Insulin resistance (i.e. obesity) in the periphery causing hyperinsulineamia (a relative excess of insulin) which reduces Shbg synthesis and leads to an increase in biologically free testosterone. Furthermore the ovary remains relatively sensitive to insulin, which stimulates thecal androgen production; And finally enhanced ovarian sensitivity to insulin (e.g. in non obese women), produces an increase in ovarian androgen secretion Hopkinson (1998).

According to Western medicine central obesity and insulin resistance leads to an altered lipolytic response to insulin, resulting in the suppression of the release of free fatty acids from adipose tissue. These fatty acids enter portal circulation increasing substrate to the liver for triglyceride production. There is also an increase in hepatic lipase responsible for the conversion of larger lipoproteins to smaller more atherogenic species. This combination of raised triglyceride and decreased high-density lipoproteins promotes the risk of cardiovascular disease and hypertension. Also there is a high risk of women developing non-insulin dependant mellitus (NIDDM), caused by the lack of responsiveness to insulin Hopkinson (1998). However some women with PCOS may escape realisation of their adverse coronary risks factors, and may be protected from developing osteoporosis due to their coexistent overproduction of oestrogen Jacobs (1996). Many seek fertility treatment, but success rates are far from optimal. If they achieve pregnancy, they have an increased miscarriage rate both in spontaneous conceptions and in those achieved by ovulation induction. Finally without proper identification and treatment, these women have a greater risk of endometrial cancer Leondries (1998).

Western Medicines Approach To Treatment of PCOS

The western protocol for the treatment of polycystic ovary syndrome depends on the prevalent symptom picture. Irregular menses are treated with the contraceptive pill, which increases Shbg, reduces free testosterone and androgen secretion but is contraindicated in overweight/obese patients as it exacerbates insulin resistance. Hirsutism is controlled by the use of anti androgen drugs; namely Cyproteroneacetate or Spironolactone (the former in combination with Ethinyloestradiol), whose principal action is to inhibit the binding of Dihydrotestosterone to its receptor at the hair follicle. Both drugs are unsuitable for those trying to conceive. Other drugs used include the combined contraceptive pill, Finasteride, GnRH (Gonadotrophin Releasing Hormone) analogues, and Glucocorticosteroids. Where there is evidence of infertility Clomiphene Citrate may be used but carries the risk of multiple

pregnancies; its action inhibits the oestrogen negative feedback loop at the hypothalamus and enhances secretion of FSH. Treatment does not generally exceed 6 months due to the risk of ovarian cancer. If Clomiphene fails, exogenous Gonadotrophins are used, but again with the risk of multiple pregnancies Leondries (1998). Treatment with insulin sensitising agents such as Metiform used in non-insulin diabetes has been shown to restore regular cycles and ovulation in obese women Hopkinson (1998). Whether or not it modifies vascular risks remains to be seen. An alternative to drug treatment includes laser or electrocautery of the ovary, but effects have shown to be short lived. Finally weight reduction results in a reduction of insulin resistance, correction of hormonal balance, promotion of ovulation and regular menses as well as improving the metabolic consequences of the disorder McCluskey et al (1992).

Traditional Chinese Medicines Approach To PCOS

Overview

From a Traditional Chinese Medicine perspective PCOS may have traditionally been considered a form of abdominal mass Maciocia (1998 pg 808). Presently Traditional Chinese Medicine directly addresses PCOS rather than the subsequent infertility, scanty periods, obesity etc, together with the more traditional pattern discrimination. Known as Zhong xi yi jie he (meaning combined or integrated Chinese-Western medicine), dual diagnosis is currently favoured Flaws (1998 pg 20). This is not to say that traditional ways are being discounted, as the best of both medical models diagnostic procedures give in Flaw's opinion a new protocol, and is the difference between clinical success and failure. This approach is reflected in the recent publication of a book by Professor Yu Jins (1998) on integrative approaches to gynaecology and obstetrics in English, which is unusual given most of the research she uses to inform her treatment strategies would otherwise be inaccessible to those unable to read Chinese.

Traditional Chinese Medicines Approach To Aetiology/Pathology In PCOS

The majority of authors attribute the development of polycystic ovary syndrome to a constitutional xu of Shen (kids) mainly Shen (kids) yang xu and to phlegm or dampness Maciocia (1998 pg 808), Yu Jin (1998 pg 60-61), Flaws (1998 pg 20). However as we will see in the review of treatments other physicians acknowledge Shen (kids) yin xu, gan qi stasis, xue stasis, and even gan fire as the other pathological patterns involved in PCOS.

When Shen (kids) yang is xu it fails to transform, evaporate and transport fluids in the lower jiao, which can accumulate create damp or phlegm. This shi condition is considered to be the cause of the formation of cysts on the ovaries, whilst Shen (kids) yang xu is said to cause infertility or amenorrhoea. In many cases there is also xue stasis. The pathogenesis for ovarian cysts is considered to be the same by this author; the difference here is that a constitutional xu of Shen (kids) yang is considered to be the basis for PCOS development Maciocia (1998 pg 808-9).

Professor Yu Jin (1998 pg 60-61) supports Maciocia's approach to PCOS, but differs in that she suggests Gan qi stasis is often present. She cites 20 case studies where prolactin levels and breast engorgement were found and where treatment was only successful when her standard formula (Appendix 6) was modified for Gan qi

stagnation. Another way in which the authors approach differs from Maciocia's is that she overtly uses western scientific research (conducted in China) to inform her prescription choices. For example she tonifies Shen (kids) with *Shu Di Huang*, *Bu Gu Zhi*, and *Yin Yang Huo*, because they have been shown to induce ovulation in cases of pubertal dysfunctional uterine bleeding. Another example includes her using *Chuan Bei Mu*, *Zao Jiao Ci*, and *Chuan Shan Jia*, which she suggests may reverse the thickening of the ovarian capsule and follicular atresia by antagonizing androgens.

Another physician Yu Huang (in Hu Xi-Ming, op. cit pg 159-161) cited by Flaws (1998 pg 157) sees the main disease mechanisms and patterns involved in PCOS as Shen (kids) xu (whether yin or yang), Gan qi stasis, phlegm dampness and xue stasis. He states if Shen (kids) are xu they are not able to drain the lower jiao of fluids, which may stagnate and congeal, as does Maciocia. Because Shen (kids) and Gan share a common root, Shen (kids) xu may perpetuate Gan qi stasis and lead to xue stasis. He differs from the previous two authors by outlining the mechanism by which yin xu can occur; If Gan qi stasis is chronic or severe it may transform into fire and consequently damage yin.

Traditional Chinese Medicines Approach To Treatment

One formula Zhong Yao Ren Gong Tiao Qi Zu Fang (Chinese formula to regulate the menstrual cycle artificially) in Maciocia (1989 pg 810-811) by Physician Hu Xi Ming (1990 Great Treatise of Secret Formulae in Chinese Medicine; Zhong Guo Zhong Yi Mi Fang Da Quan) is composed of four groups of formulae two within each group for yin or yang xu (Appendix 1 formula content/explanation). Each group is taken for seven days to establish a menstrual cycle artificially in the absence of periods. This approach is also favoured by another physician Yu Huang in Flaws (1998 pg 157)(Appendix 2 formula content/explanation).

There are few small dissimilarities between these two physicians protocols and selection of herbs. In the first Group (yang xu category), which contains herbs to promote the development of follicles Hu Xi Ming additionally uses *ba ji tian*; In the yin xu category Yu Huang additionally uses *zhi shou wu*, whereas Hu Xi Ming uses *wu yao*. In the second group (yin/yang xu categories), which promote ovulation both authors selection of herbs are identical; In the third group (yang xu category) which contain herbs to promote the development of the corpus luteum Yu Huang additionally uses *zhi shou wu*, whereas Hu Xi Ming uses *wu yao*; In the yin xu category Hu Xi Ming additionally uses *dan shen*, *wu yao*, *tu si zi* and Yu Huang additionally uses *zhi shou wu*; In the fourth and final group (yang xu category) which contains herbs to invigorate xue and induce the period both authors selection of herbs are identical ; In the yin xu category Hu Xi Ming additionally uses *chuang xiong*.

Yu Huang used this protocol on 27 women, which all ovulated after three months, of these 24 conceived within three years claiming a success rate of 88.8%. However this piece of research was not available to critique in English. Furthermore it is not known whether the use of different herbs as opposed to Hu Mi Xing prescriptions are more successful as Maciocia does not support this authors approach with clinical research.

The selection of different herbs by these authors could be supposed, however not within the scope of this work. Having said that the simple comparison of ingredients

between the two, and tailoring each phase to yin or yang xu enables easier modification for patients' individual patterns. Although it is noted that these authors prescriptions do not address phlegm Dampness.

Contrary to this Zhang En-qin et al's in Flaws (1998 Pg 155) does focus his approach more on Phlegm Dampness using Cang Fu Dao Tan Wan Jia Jian (Appendix 3 formula content/explanation), and Shen (kids) xu; Zuo Gui Wan Jia Jian (to tonify essence and scatter nodulation), (Appendix 4 formula content/explanation). However trials using this formula were not given.

Another two physicians Pang Bao-zhen and Zhao Huan-yun's in Flaws (1998 pg 121) published protocols and research in 1992 for anovulation, which included a large number of PCOS patients. Their approach was slightly unusual in that they compared two formulas effectiveness, one that supplemented Shen (kids)(Bu Shen Fang) alone and a second that supplemented Shen (kids) whilst regulating Gan (Bu Shen Shu Gan Fang) (Appendix 5 formula content). The comparison was unusual at the time as many physicians did not consider regulating gan as important as assigning loss of fertility (i.e. PCOS) solely to a matter of tonifying Shen (kids).

Using the formula Bu Shen Fang amongst 25 women with PCOS resulted in 6 being cured, 8 had pronounced improvement, 6 had slight improvement, and 5 had no improvement. The results using Bu Shen Shu Gan Fang on 26 women with PCOS resulted in 8 being completely cured, 12 had pronounced improvement, 3 had some improvement, and 3 had no improvement (Flaws 1998 pg 122). As we can see there is a marginally higher success rate with the formula that regulates gan qi, which is the experience of two later authors Yu Huang (in Flaws 1998 pg 157) and Professor Yu Jin (1998).

Professor Yu Jin's (1998 pg 61) formula for PCOS (Appendix 6 formula content/explanation) was investigated in a one study of 133 patients, of which 82.7% ovulated, and of the 76 infertile women, 36 became pregnant. In support of Pang Bao-zhen and Zhao Huan-yun's approach Professor Yu Jin found that In more than 20% of the cases where prolactin levels, and breast engorgement were found her formula was only successful when she modified it for Gan qi stagnation. With constrained Gan qi she removed *Zao Jiao Ci*, and *Chuan Bei Mu* and added *Mu Dan Pi* 9g, *Zhi Zi* 12g, *Chai Hu* 6g, and *Qing Pi* 6g. She removed the phlegm reducing herbs in favour of adding more qi/xue moving herbs, with an emphasis on cooling function hence quenching heat from an over expanded Gan. Having said that these additions are still working to reducing phlegm/and or damp, and specifically go to Gan whereas the subtractions do not (Professor Yu Jin 1998 Pg 61).

Under investigation her formula was shown to have a definite action on regulating the ovarian function, increasing FSH and E2 levels and thus reducing LH/FSH and the T/E2 ratios. The increase in E2 levels act on the positive feedback mechanism, which then causes ovulation.

Yu Huang another physician cited by Flaws (1998 pg 157) uses the formula Yu Shi Wen Bu Fang Protocol (Appendix 7 formula/explanation) which contains the same herbs as Professor Yu Jins prescription except for her additional use of *Shan yao*, *Chuan bei mu*, *Dang gui* and *Tao ren*. At the same time he similarly uses the same

additions for gan qi stagnation. His formula resulted in 82.7% of the women ovulating, and of the 76 women complaining of infertility 36 conceived. Unfortunately what is not clear is how many of these women were treated with the formula plus its additions, and what their pattern differentiation was.

Finally as noted by Yu Huang (in Hu Xi-Ming, op. cit pg 159-161) cited by Flaws (1998 pg 157) in the earlier discussion of pathogenesis if gan qi stasis is chronic or severe gan fire can arise. Wang (1988) treated 21 cases of gan fire, 6 cases of shen (kids) xu, and one case of phlegm dampness with the formula Long Dan Xie Gan Tang in standard trial conditions (Appendix 8 Formula/explanation).

Of the 27 cases with amenorrhoea, menstruation returned in 26; its duration averaged 29.4 days, ranging from 4 to 125 days. The length of treatment was 3-4 months in 14 cases; 5-6 months in 7 cases. Of these 22 cases were followed up 9 women became pregnant; normal menstruation returned in 8 cases, and in 5 cases the condition relapsed to the pre treatment status.

Summary

Conventional medicine's lack of success in treating PCOS means that many women turn to complimentary therapies. Much of Chinese herbal medicines clinical success with PCOS is anecdotal, as we have seen. The little research that is available is inaccessible to those practitioners unable to read Chinese. And as different prescriptions are routinely given to patients with the traditional diagnosis, variations are expected for patients with the same condition which makes research challenging.

However there are encouraging developments in this area. Two trials of Traditional Chinese herbs for excema in 1992 and more recent one in 1994 by Sheehan, successfully and sensitively use orthodox methodology; open and definitive trial methods; and thorough follow up to assess long term outcome and toxicity. If used to inspire future generations of investigators, Chinese Herbal Medicine could fulfil its potential as viable treatment option for PCOS and aid the professions development in the UK.

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Appendix 1

Zhong Yao Ren Gong Tiao Qi Zu Fang (Chinese formula to regulate the menstrual cycle artificially) cited from **Hu Xi Ming 1990 Great Treatise of Secret Formulae in Chinese Medicine (Zhong Guo Zhong Yi Mi Fang Da Quan)**, Centre Publishing House, Shanghai, Vol. 2, p.175 in (Maciocia 1989 pg 810-811).

Group 1 Herbs promote the development of follicles, and are used after the period.

Shen (kids) Yang Xu.

Xian mao 6g, Xian Ling Pi 6g, Dang Gui 6g, Shan Yao 6g, Tu Si Zi 6g, Ba Ji Tian 6g, Rou Cong Rong 6g, Shu Di Huang 6g.

Explanation:

Xian Mao, Xian Ling Pi, Ba Ji Tian, Tu Si Zi, Rou Cong Rong are acrid/warm/tonify Shen (kids) yang. *Shan Yao* supports the former herbs by warming yang and tonifying post heaven essence. *Dang Gui* moves and nourishes xue, which can stagnate in the uterus as xu Shen (kids) yang fails to lead xue (Lyttleton Dec 2001). *Shu Di Huang* supports the former by nourishing xue and essence (Maciocia 1989 pg 811).

Individual herb analysis

Xian Mao is acrid, hot, and toxic and enters Gan and Shen (kids) jing luo. It tonifies Shen (kids) yang and expels cold and damp in the lower jiao (warms the womb) (Bensky 1983 pg 346).

Xian Ling Pi (Yin Yang Huo) is acrid, warm and enters the Shen (kids) and Gan jing luo. It tonifies Shen (kids) yang, expels wind damp cold, tonifies both yin and yang to restrain Gan yang rising (Bensky 1993 pg 341).

Dang Gui, sweet, and warm enters Gan, Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue. Also moistens the intestines (Bensky 1993 pg 329).

Shan Yao sweet, neutral enters Shen (kids) Fei, Pi. Tonifies and augments Pi and Wei (st). Tonifies Fei qi. Tonifies shen and stabilises and binds. Benefits yin and yang of the Shen (kids). Binds essence (Bensky 1993 pg 320).

Tu Si Zi is acrid, sweet, neutral and enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence. Tonifies Gan and Shen (kids) yin. Benefits Pi and Shen (kids) yang qi (Bensky 1993 pg 350).

Ba Ji Tian is acrid, sweet, warm and enters the Shen (kids) and Gan. Tonifies Shen (kids) and fortifies yang. Strengthens sinews and bones, disperses wind and expels damp cold (Bensky 1993 pg 342).

Rou Cong Rong Tonifies and strengthens yang. Warms the womb, and moistens the intestines (Bensky 1993 pg 339).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Shen (kids) Yin Xu

Nu Zhen Zi 6g, Han Lian Cao 4.5g, Dan Shen 4.5g Tu Si Zi 6g, Shu Di Huang 6g, Rou Cong Rong 6g, Wu Yao 3g.

Explanation:

***Nu Zhen Zi, Han Lian Cao, and Shan Yao* nourish Shen (kids) yin, following the principle of tonifying yin and yang of Shen to produce a harmonious prescription *Tu Si Zi* and *Rou Cong Rong* are used here to warm Shen (kids) yang. *Dan Shen* moves xue, whilst *Wu Yao* moves qi, and *Shu Di Huang* tonifies of xue /essence which supports the yin nourishing herbs here (Maciocia 1989 pg 811).**

Individual herb analysis

Nu Zhen Zi is bitter, sweet, neutral and enters the Shen (kids) and Gan jing luo to nourish Gan and Shen (kids) yin and clear xu heat (Bensky 1993 pg 365-6).

Han Lian Cao is sweet, sour, and cool enters Shen (kids) and Gan jing luo to nourish and tonify Gan and Shen (kids) yin, as well as cooling xue and arresting bleeding (Bensky 1993 pg 365).

Dan Shen is bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Tu Si Zi is acrid, sweet, neutral and enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence. Tonifies Gan and Shen (kids) yin. Benefits Pi and Shen (kids) yang qi (Bensky 1993 pg 350).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Rou Cong Rong Tonifies and strengthens yang. Warms the womb, and moistens the intestines (Bensky 1993 pg 339)

Wu Yao is acrid and warm and enters the bladder, Shen (kids), Fei and Pi jing luo to promote the movement of qi and alleviate pain, as well as warming Shen (kids) (Bensky 1993 pg 238-9).

Group 2 Herbs to promote ovulation.

Shen (kids) Yang Xu

Dang Gui 6g, Dan Shen 4.5g, Tao Ren 4.5g, Hong Hua 3g, Ji Xue Teng 6g, Yi Mu Cao 4.5g, Xu Duan 6g, Xiang Fu 4.5g, Gui Zhi 4.5g

Explanation:

Dang Gui, Dan Shen, Tao Ren, Hong Hua, Ji Xue Teng, Yi Mu Cao move xue and eliminate stasis. *Dang Gui* and *Ji xue teng* also have a tonifying effect as well as entering Chong and Ren Mai to regulate menses. *Xiang Fu* supports the xue moving herbs by moving qi. Whereas *Xuan Duan* and *Gui Zhi* warm Shen (kids) Yang to lead xue (Maciocia 1989 pg 811).

Individual herb analysis

Dang Gui, sweet, warm enters Gan, Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue. Also moistens the intestines (Bensky 1993 pg 329).

Dan Shen bitter, slightly cold enters Xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Tao Ren is bitter, sweet, neutral and enters Xin, Da Chang, Gan and Fei to eliminate xue stasis and moisten and unblock the intestines (Bensky 1993 pg 279).

Hong Hua is acrid/warm and enters Xin and Gan jing Luo to invigorate xue and unblock menstruation, dispel xue stasis and alleviate pain (Bensky 1993 pg 280).

Ji Xue Teng bitter, sweet, warm enters Xin, Pi, and Gan jing luo to promote the movement of xue in the jing luo and well as having a tonifying effect on xue (Bensky 1993 pgs 268-269).

Yi Mu Cao acrid, bitter, slightly cold enters Xin, Gan, and bladder jing luo to invigorate xue and regulate the menses (Bensky 1993 pg 273).

Xu Duan bitter, acrid, slightly warm enters Shen (kids) and Gan jing luo to tonify Shen (kids) and Gan, and strengthens sinews and bones, as well as promoting the movement of xue (Bensky 1993 pg 349).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236)

Gui Zhi acrid, bitter, warm enters xin, fei, bladder jing luo's to adjusts nutritive and protective qi, warm the jing luo's, disperses cold, and unblocks yang qi (Bensky 1993 pg 29)

Shen (kids) Yin Xu

Dan Shen 4.5g, Chi Shao 4.5g, Ze Lan 4.5g, Shu Di Huang 6g, Gou Qi Zi 6g, Tao Ren 4.5g, Hong Hua 3g, Yi Yi Ren 9g, Xiang Fu 3g.

Explanation:

Dan Shen, Chi Shao, Ze Lan, Tao Ren, Hong Hua move xue and eliminate xue stasis. *Hong Hua* and *Ze Lan* also unblock the menstruation (Chong and Ren jing luo's), whilst *Chi Shao* has the ability to cool xue and clear heat. *Xiang Fu* supports the xue invigorators by moving qi and regulating menstruation, *Shu Di Huang* and *Gou Qi Zi* nourish xue thereby protecting xue against the moving

herbs in this prescription. Finally Yi Yi Ren drains dampness. It is interesting to note that Yi Yi Ren has been used in the yin-tonifying group but not the former yang-tonifying group. (Maciocia 1989 pg 811).

Individual herb analysis

Dan Shen bitter, slightly cold and enters Xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Chi Shao Yao sour, bitter, slightly cold enters Gan/Pi to invigorates xue and dispel xue stasis, clear heat and cools xue, clears Gan fire (Bensky 1993 pg 277-8)

Ze Lan bitter, acrid, slightly warm, aromatic enters Gan/Pi to move xue and facilitates menstruation, dispels xue stasis, and promotes urination (Bensky 1993 pg 274).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Tao Ren is bitter, sweet, neutral enters Xin, Da Chang, Gan and Fei to eliminate xue stasis and moisten and unblock the intestines (Bensky 1993 pg 279).

Hong Hua acrid/warm and enters Xin and Gan jing Luo to invigorate xue and unblock menstruation, dispel xue stasis and alleviate pain (Bensky 1993 pg 280).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236)

Group 3 Herbs promote the development of the corpus luteum before the period Shen (kids) Yang Xu

E Jiao 6g, Gui Ban Jiao 6g, Dang Gui 6g, Shu Di Huang 6g, Wu Yao 4.5g, Tu Si Zi 6g, Xu Duan 6g, Xiang Fu 3g, Gui zhi 3g.

Explanation:

E Jiao, Gui Ban Jiao, Dang Gui, Shu Di Huang, nourish xue. Gui Ban Jiao, and Shu Di Huang tonify Shen (kids) and strengthen Chong and Ren Mai. Wu Yao 4.5g, Tu Si Zi, Xu Duan, and Gui zhi warm and tonify Shen (kids) yang, at the same time Tu Si Zi also secures essence and augments yin, whilst Xuan Duan also moves xue. Finally Xiang Fu and Wu Yao move qi (Maciocia 1989 pg 811).

Individual herb analysis

E Jiao sweet, neutral enters Shen (kids), Gan, Fei tonifies xue, nourishes xue/ yin and stops bleeding (Bensky 1993 pg 332-333).

Gui Ban salty, sweet, cold enters Xin, Shen (kids), Gan to nourish yin, of Shen (kids) and Gan and anchor Gan yang rising, cools xue and stops uterine bleeding, nourishes xue and tonifies Xin (Bensky 1993 pg 367).

Dang Gui, sweet, and warm enters Gan; Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue. Also moistens the intestines (Bensky 1993 pg 329).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Wu Yao is acrid and warm and enters the bladder, Shen (kids), Fei and Pi jing luo to promote the movement of qi and alleviate pain, as well as warming Shen (kids) (Bensky 1993 pg 238-9).

Tu Si Zi is acrid, sweet, neutral enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence.

Xu Duan bitter, acrid, slightly warm enters Shen (kids) and Gan jing luo to tonify Shen (kids) and Gan, and strengthens sinews and bones, as well as promoting the movement of xue (Bensky 1993 pg 349).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Gui Zhi acrid, bitter, warm enters xin, fei, bladder jing luo's to adjust nutritive and protective qi, warm the jing luo's, disperses cold, and unblocks yang qi (Bensky 1993 pg 29).

Shen (kids) Yin Xu

Dan Shen 4.5g, Gui Ban Jiao 6g, Gou Qi Zi 6g, Nu Zhen Zi 6g, Han Lian Cao 4.5g, Shu Di Huang 6g, Wu Yao 3g, Rou Cong Rong 3g, Tu Si Zi 6g

Explanation:

Dan Shen moves and cools xue, **Gui Ban Jiao**, **Gou Qi Zi**, **Nu Zhen Zi**, **Han Lian Cao**, nourish Shen (kids) yin. **Shu Di Huang** nourishes xue and essence, which supports the former herbs. **Tu Si Zi** also supports yin as well as tonifying and warming Shen (kids) yang together with **Rou Cong Rong** and **Wu Yao**, which also moves qi (Maciocia 1989 pg 811).

Individual herb analysis

Dan Shen is bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Gui Ban Jiao has the same properties as gui ban although enriches yin exclusively (Bensky 1993 pg 368)

Gou Qi Zi sweet, neutral enters Gan, Fei, and Shen (kids) jing luo to nourish Gan and Shen (kids) yin, as well as benefiting essence (Bensky 1993 pg 333)

Nu Zhen Zi is bitter, sweet, neutral and enters the Shen (kids) and Gan jing luo to nourish Gan and Shen (kids) yin and clear xu heat (Bensky 1993 pg 365-6).

Han Lian Cao is sweet, sour, and cool enters Shen (kids) and Gan jing luo to nourish and tonify Gan and Shen (kids) yin, as well as cooling xue and arresting bleeding (Bensky 1993 pg 365).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Wu Yao is acrid and warm and enters the bladder, Shen (kids), Fei and Pi jing luo to promote the movement of qi and alleviate pain, as well as warming Shen (kids) (Bensky 1993 pg 238-9).

Rou Cong Rong Tonifies and strengthens yang. Warms the womb, and moistens the intestines (Bensky 1993 pg 339).

Tu Si Zi is acrid, sweet, neutral and enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence (Bensky 1993 pg 350).

Group 4 herbs (for during the period) invigorate xue and induce the period.

Shen (kids) Yang Xu.

Dang Gui 6g, Shu Di Huang 6g, Dan Shen 4.5g, Chi Shao 4.5g, Ze Lan 4.5g, Chuan Xiong 4.5g, Yi Mu Cao 4.5g, Xiang Fu 3g.

Explanation:

Shu Di Huang and Dang Gui nourish xue whilst Dan Shen, Chi Shao, Ze Lan, Chuan Xiong, and Yi Mu Cao move xue and break stasis. Xiang fu assist the former by moving qi (Maciocia 1989 pg 811).

Individual herb analysis

Dang Gui, sweet, and warm enters Gan, Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue. Also moistens the intestines (Bensky 1993 pg 329).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Dan Shen is bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Chi Shao Yao sour, bitter, slightly cold enters Gan/Pi to invigorates xue and dispel xue stasis, clear heat and cools xue, clears Gan fire (Bensky 1993 pg 277-8)

Ze Lan bitter, acrid, slightly warm, aromatic enters Gan/Pi to move xue and facilitates menstruation, dispels xue stasis, and promotes urination (Bensky 1993 pg 274).

Chuan Xiong acrid, warm enters Gan, Dan, pericardium to invigorate xue, move qi, expels wind, alleviates pain as well as moving qi upwards (Bensky 1993 pg 266).

Yi Mu Cao acrid, bitter, slightly cold enters Xin, Gan, and bladder jing luo to invigorate xue and regulate the menses (Bensky 1993 pg 273).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Shen (kids) Yin Xu,

Dan Shen 4.5g, Chi Shao 4.5g, Ze Lan 4.5g, Shu Di Huang 6g, Fuling 6g, Dang Gui 6g, Xiang Fu 3g, Yi Mu Cao 4.5g.

Explanation:

***Dan Shen, Chi Shao, Ze Lan, and Yi Mu Cao* move xue and eliminate xue stasis, aided by *Xiang Fu*, which moves qi. *Shu Di Huang* and *Dang Gui* nourish xue thereby supporting yin, and *Fuling* resolves any dampness (Maciocia 1989 pg 811).**

Individual herb analysis

Dan Shen is bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Chi Shao Yao sour, bitter, slightly cold enters Gan/Pi to invigorates xue and dispel xue stasis, clear heat and cools xue, clears Gan fire (Bensky 1993 pg 277-8).

Ze Lan bitter, acrid, slightly warm, aromatic enters Gan/Pi to move xue and facilitates menstruation, dispels xue stasis, and promotes urination (Bensky 1993 pg 274).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Fuling sweet, bland, neutral enters Xin, Pi, Fei to promote urination and leach dampness, tonify Pi, transform phlegm and harmonise the middle jiao as well as calming shen (Bensky 1993 pg 132).

Dang Gui, sweet, and warm enters Gan, Xin; Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue (Bensky 1993 pg 329).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Yi Mu Cao acrid, bitter, slightly cold enters Xin, Gan, and bladder jing luo to invigorate xue and regulate the menses (Bensky 1993 pg 273).

Appendix 2**Yu Huang cited by Flaws (1998 pg 157)****Four different formulas to treat four different stages of the menstrual cycle.****Phase 1 Cu Luan Bao Tang****If Shen (kids) Yang Xu use:**

Xian Ma, Rou Cong Rong, Xian Ling Pi (Yin Yang Huo), Shu Di Huang, Dang Gui, Dang gui, Tu Si Zi, Shan Yao.

Explanation:

Xian Mao, Rou Cong Rong, Xian Ling Pi (Yin Yang Huo) tonify/warm Shen (kids) yang/ womb, whilst yin yang huo also nurtures yin (Bensky 1993 PG 339, 341, 346). The former herb supports the yin /essence/xue nourishing herbs *Shu Di Huang, Dang Gui* sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence, *Dang gui* also invigorates xue (Bensky 1993 pg 327, 329). *Tu Si Zi* tonifies Shen (kids), augments yin, and secures essence (Bensky 1993 pg 350). *Shan Yao* tonifies and augments Pi and Wei (st) to produce post heaven qi, and at the same time supports the former herbs by tonifying Shen (kids) and binds essence (Bensky 1993 pg 320).

Individual Herb analysis:

Xian Ma Xian Mao is acrid, hot, and toxic and enters Gan and Shen (kids) jing luo. It tonifies Shen (kids) yang and expels cold and damp in the lower jiao (warms the womb) (Bensky 1993 pg 346).

Rou Cong Rong Tonifies and strengthens yang. Warms the womb, and moistens the intestines (Bensky 1993 pg 339).

Xian Ling Pi (Yin Yang Huo) is acrid, warm and enters the Shen (kids) and Gan jing luo. It tonifies Shen (kids) yang, expels wind damp cold, tonifies both yin and yang to restrain Gan yang rising (Bensky 1993 pg 341).

Shu Di Huang sweet, slightly warm enters Xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Dang Gui, sweet, and warm enters Gan, Xin; Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue (Bensky 1993 pg 329).

Tu Si Zi is acrid, sweet, neutral and enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence (Bensky 1993 pg 350).

Shan Yao sweet, neutral enters Shen (kids) Fei, Pi. Tonifies and augments Pi and Wei (st). Tonifies Fei qi. Tonifies shen and stabilises and binds. Benefits yin and yang of the Shen (kids). Binds essence (Bensky 1993 pg 320).

If Shen (kids) Yin xu use:**Individual Herb analysis:**

Nu Zhen Zi, Han Lian Cao, Dan Shen, Shan Yao, Tu Si Zi, Zhi Shou Wu, Rou Cong Rong, Shu Di Huang.

Explanation:

Nu Zhen Zi, Han Lian Cao Tu Si Zi nourish Gan and Shen (kids) yin (Bensky 1993 pg 350, 365-6). ***Dan Shen*** aids the former by clearing heat, and moving xue and soothing irritability (Bensky 1993 pg 267). ***Zhi Shou Wu, Shu Di Huang*** tonifies xue and essence (Bensky 1993 pg 327, 329) ***Rou Cong Rong*** Tonifies and strengthens yang and warms the womb, thereby balancing the yin nurturing herbs (Bensky 1993 pg 339). Finally ***Shan Yao*** tonifies and augments Pi and Wei (st) (post heaven essence) thereby benefiting yin and yang of the Shen (kids) (Bensky 1993 pg 320).

Nu Zhen Zi bitter, sweet, neutral and enters the Shen (kids) and Gan jing luo to nourish Gan and Shen (kids) yin and clear xu heat (Bensky 1993 pg 365-6).

Han Lian Cao is sweet, sour, and cool enters Shen (kids) and Gan jing luo to nourish and tonify Gan and Shen (kids) yin, as well as cooling xue and arresting bleeding (Bensky 1993 pg 365).

Dan Shen bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Shan Yao sweet, neutral enters Shen (kids) Fei, Pi. Tonifies and augments Pi and Wei (st). Tonifies Fei qi. Tonifies shen and stabilises and binds. Benefits yin and yang of the Shen (kids). Binds essence (Bensky 1993 pg 320).

Tu Si Zi acrid, sweet, neutral and enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence (Bensky 1993 pg 350).

Zhi Shou Wu bitter, sweet, astringent, slightly warm enters Gan, Shen (kids) to nourish xue, augment essence, secure essence, stop leakage, relieve fire toxicity, moisten the intestine, unblock the bowels, expel wind from the skin (Bensky 1993 pg 329)

Rou Cong Rong Tonifies and strengthens yang. Warms the womb, and moistens the intestines (Bensky 1993 pg 339).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Phase 11 Cu Pai Luan Tang**If Shen (kids) Yang Xu****Explanation:**

Dang Gui tonifies xue, and regulates the menses, as well as invigorating and harmonising xue, ***Dan Shen*** invigorates xue, eliminates xue stasis especially in the

lower jiao, as well as clearing heat (Bensky 1993 pg 267). **Chong Wei Zi** breaks up xue stasis, and has an astringing/tonifying quality (Bensky 1993 pg 274).

Tao Ren, Hong Hua Ji Xue Teng, Xu Duan eliminates xue stasis and moistens and unblocks the intestines (Bensky 1993 pg 268-9, 279, 280, 349). **Xiang Fu** course Gan qi (Bensky 1993 pg 236). Finally **Gui Zhi** adjusts nutritive and protective qi, disperses cold, and unblocks yang qi (Bensky 1993 pg 29)

Dang Gui, sweet, and warm enters Gan, Xin; Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue (Bensky 1993 pg 329).

Dan Shen bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Chong Wei Zi sweet, slightly cold breaks up xue stasis, and has an astringing/tonifying quality. It also cools Gan, and brightens the eyes (Bensky 1993 pg 274).

Tao Ren bitter, sweet, neutral and enters Xin, Da Chang, Gan and Fei to eliminate xue stasis and moisten and unblock the intestines (Bensky 1993 pg 279).

Hong Hua acrid/warm and enters Xin and Gan jing Luo to invigorate xue and unblock menstruation, dispel xue stasis and alleviate pain (Bensky 1993 pg 280).

Ji Xue Teng bitter, sweet, warm enters Xin, Pi, and Gan jing luo to promote the movement of xue in the jing luo and well as having a tonifying effect on xue (Bensky 1993 pgs 268-269).

Xu Duan bitter, acrid, slightly warm enters Shen (kids) and Gan jing luo to tonify Shen (kids) and Gan, and strengthens sinews and bones, as well as promoting the movement of xue (Bensky 1993 pg 349).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Gui Zhi acrid, bitter, warm enters xin, fei, bladder jing luo's to adjusts nutritive and protective qi, warm the jing luo's, disperses cold, and unblocks yang qi (Bensky 1993 pg 29)

If Shen (kids) Yin Xu use-

Yi Ren, Xiang Fu, Dan Shen, Chi Shao Yao, Ze Lan, Shu Di Huang, Gou Qi Zi, Tao Ren, Hong Hua.

Explanation:

Shu Di Huang, Gou Qi Zi tonifies xue and essence (Bensky 1993 pgs 274, 333, 327). **Dan Shen** clears heat and soothes irritability (Bensky 1993 pg 267). **Chi Shao Yao** supports the former by clearing heat and cooling/moving xue, clears Gan fire (Bensky 1993 pgs 277-8). Other xue movers include **Tao Ren, Hong Hua, Ze Lan**, which dispel xue stasis and alleviate pain (Bensky 1993 pgs 279, 280). **Xiang Fu** course Gan

qi and regulate menstruation (Bensky 1993 pg 236). Finally *Yi Yi Ren* drains dampness.

Individual Herb analysis:

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Dan Shen bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Chi Shao Yao sour, bitter, slightly cold enters Gan/Pi to invigorates xue and dispel xue stasis, clear heat and cools xue, clears Gan fire (Bensky 1993 pg 277-8).

Ze Lan bitter, acrid, slightly warm, aromatic enters Gan/Pi to move xue and facilitates menstruation, dispels xue stasis, and promotes urination (Bensky 1993 pg 274).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Gou Qi Zi sweet, neutral enters Gan, Fie, and Shen (kids) jing luo to nourish Gan And Shen(kids) yin, as well as benefiting essence (Bensky 1993 pg 333)

Tao Ren bitter, sweet, neutral enters Xin, Da Chang, Gan and Fei to eliminate xue stasis and moisten and unblock the intestines (Bensky 1993 pg 279).

Hong Hua acrid/warm and enters Xin and Gan jing Luo to invigorate xue and unblock menstruation, dispel xue stasis and alleviate pain (Bensky 1993 pg 280).

Phase 111 Cu Huang Ti Tang

Shen (kids) Yang Xu-

E Jiao, Gui Ban, Dang Gui, Shu Di Huang, Zhi Shou Wu, Tu Si Zi, Xu Duan, Xiang Fu, Gui Zhi.

Explanation:

E Jiao Gui Ban Zhi Shou Wu tonifies xue, nourishes xue/ yin (Bensky 1993 pgs 332-333,367,329). *Tu Si Zi* augments yin, and secures essence (Bensky 1993 pg 350).

Dang Gui, Shu Di Huang supports the former by tonifying xue (Bensky 1993 pgs 327, 329). *Xu Duan* promotes the movement of xue (Bensky 1993 pg 349), supported by *Xiang Fu* that moves qi (Bensky 1993 pg 236) to lead the xue and prevent stasis from xu cold which is warmed/ dispersed by *Gui Zhi* (Bensky 1993 pg 29)

Individual Herb analysis:

E Jiao sweet, neutral enters Shen (kids), Gan, Fei tonifies xue, nourishes xue/ yin and stops bleeding (Bensky 1993 pg 332-333).

Gui Ban salty, sweet, cold enters Xin, Shen (kids), Gan to nourish yin, of Shen (kids) and Gan and anchor Gan yang rising, cools xue and stops uterine bleeding, nourishes xue and tonifies Xin (Bensky 1993 pg 367).

Dang Gui sweet, and warm enters Gan; Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue. Also moistens the intestines (Bensky 1993 pg 329).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Zhi Shou Wu bitter, sweet, astringent, slightly warm enters Gan, Shen (kids) to nourish xue, augment essence, secure essence, stop leakage, relieve fire toxicity, moisten the intestine, unblock the bowels, expel wind from the skin (Bensky 1993 pg 329)

Tu Si Zi acrid, sweet, neutral and enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence. Tonifies Gan and Shen (kids) yin. Benefits Pi and Shen (kids) yang qi (Bensky 1993 pg 350).

Xu Duan bitter, acrid, slightly warm enters Shen (kids) and Gan jing luo to tonify Shen (kids) and Gan, and strengthens sinews and bones, as well as promoting the movement of xue (Bensky 1993 pg 349).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Gui Zhi acrid, bitter, warm enters xin, fei, bladder jing luo's to adjust nutritive and protective qi, warm the jing luo's, disperses cold, and unblocks yang qi (Bensky 1993 pg 29)

If Shen (kids) yin xu

Gui Ban, Gou Qi Zi, Shu Di Huang, Zhi Shou Wu, Rou Cong Rong, Dan Shen, Nu Zhen Zi, Han Lian Cao.

Explanation:

Gui Ban nourish yin, cools xue and stops uterine bleeding, nourishes xue (Bensky 1993 pg 367). Similarly **Han Lian Cao** nourish and tonify Gan and Shen (kids) yin, as well as cooling xue and arresting bleeding (Bensky 1993 pg 365). **Nu Zhen Zi, Gou Qi Zi Zhi Shou Wu** nourishes yin, as well as benefiting essence (Bensky 1993 pg 329, 333, 365-6). Supported by **Shu Di Huang**, and **Dan Shen**, which clears heat and soothes irritability (Bensky 1993 pg 267). **Rou Cong Rong** strengthens yang, balancing the Shen yin tonifying herbs (Bensky 1993 pg 339).

Individual Herb analysis:

Gui Ban salty, sweet, cold enters Xin, Shen (kids), Gan to nourish yin, of Shen (kids) and Gan and anchor Gan yang rising, cools xue and stops uterine bleeding, nourishes xue and tonifies Xin (Bensky 1993 pg 367).

Gou Qi Zi sweet, neutral enters Gan, Fie, and Shen (kids) jing luo to nourish Gan And Shen (kids) yin, as well as benefiting essence (Bensky 1993 pg 333).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Zhi Shou Wu bitter, sweet, astringent, slightly warm enters Gan, Shen (kids) to nourish xue, augment essence, secure essence, stop leakage, relieve fire toxicity, moisten the intestine, unblock the bowels, expel wind from the skin (Bensky 1993 pg 329)

Rou Cong Rong Tonifies and strengthens yang. Warms the womb, and moistens the intestines (Bensky 1993 pg 339).

Dan Shen bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Nu Zhen Zi bitter, sweet, neutral and enters the Shen (kids) and Gan jing luo to nourish Gan and Shen (kids) yin and clear xu heat (Bensky 1993 pg 365-6).

Han Lian Cao is sweet, sour, and cool enters Shen (kids) and Gan jing luo to nourish and tonify Gan and Shen (kids) yin, as well as cooling xue and arresting bleeding (Bensky 1993 pg 365).

Phase IV Huo Xue Tiao Jing Tang

If Shen (kids) Yang Xu use-

Dang Gui, Dan Shen, Chi Shao Yao, Ze Lan, Shu Di Huang, Xiang Fu, Chuan Xiong, Chong Wei Zi.

Explanation:

Chuan Xiong, Chong Wei Zi, Ze Lan, Dan Shen invigorates xue, (Bensky 1993 pg 266, 267, 274). **Chi Shao Yao** invigorates xue and dispel xue stasis as well as clearing heat and cooling xue (Bensky 1993 pg 277-8). **Dang Gui** aids the former by moving xue as well as tonifying xue (Bensky 1993 pg 329). **Shu Di Huang** aids the former by tonifying xue and essence (Bensky 1993 pg 327). **Xiang Fu** courses Gan qi and therefore helps lead xue (Bensky 1993 pg 236).

Individual Herb analysis:

Dang Gui sweet, and warm enters Gan; Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue. Also moistens the intestines (Bensky 1993 pg 329).

Dan Shen bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Chi Shao Yao sour, bitter, slightly cold enters Gan/Pi to invigorates xue and dispel xue stasis, clear heat and cools xue, clears Gan fire (Bensky 1993 pg 277-8).

Ze Lan bitter, acrid, slightly warm, aromatic enters Gan/Pi to move xue and facilitates menstruation, dispels xue stasis, and promotes urination (Bensky 1993 pg 274).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Chuan Xiong acrid, warm enters Gan, Dan, pericardium to invigorate xue, move qi, expels wind, alleviates pain as well as moving qi upwards (Bensky 1993 pg 266).

Chong Wei Zi sweet, slightly cold, breaks up xue stasis, and has an astringing/tonifying quality. It also cools Gan, and brightens the eyes (Bensky 1993 pg 274).

If Shen (kids) Yin Xu

Dan Shen, Chi Shao Yao, Ze Lan, Shu Di Huang, Chong Wei Zi, Dang Gui, Fuling, Xiang Fu.

Explanation:

Chuan Xiong, Chong Wei Zi, Ze Lan, Dan Shen invigorates xue, (Bensky 1993 pg 266, 267, 274). **Chi Shao Yao** invigorates xue and dispel xue stasis as well as clearing heat and cooling xue (Bensky 1993 pg 277-8). **Dang Gui** aids the former by moving xue as well as tonifying xue (Bensky 1993 pg 329). **Shu Di Huang** aids the former by tonifying xue and essence (Bensky 1993 pg 327). **Xiang Fu** courses Gan qi and therefore helps lead xue (Bensky 1993 pg 236). **Fuling** promote urination and leach dampness, tonifies Pi (Bensky 1993 pg 132).

Individual Herb analysis:

Dan Shen bitter, slightly cold and enters xin, pericardium, and Gan jing luo to invigorate xue, and eliminate xue stasis especially in the lower jiao, as well as clearing heat and soothing irritability (Bensky 1993 pg 267).

Chi Shao Yao sour, bitter, slightly cold enters Gan/Pi to invigorates xue and dispel xue stasis, clear heat and cools xue, clears Gan fire (Bensky 1993 pg 277-8).

Ze Lan bitter, acrid, slightly warm, aromatic enters Gan/Pi to move xue and facilitates menstruation, dispels xue stasis, and promotes urination (Bensky 1993 pg 274).

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Chong Wei Zi sweet, slightly cold breaks up xue stasis, and has an astringing/tonifying quality. It also cools Gan, and brightens the eyes (Bensky 1993 pg 274).

Dang Gui, sweet, and warm enters Gan; Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue. Also moistens the intestines (Bensky 1993 pg 329).

Fuling sweet, bland, neutral enters Xin, Pi, Fei to promote urination and leach dampness, tonify Pi, transform phlegm and harmonise the middle jiao as well as calming shen (Bensky 1993 pg 132).

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Appendix 3

Zhang En-qin et al's Phlegm Dampness formula Cang Fu Dao Tan Wan Jia Jian Flaws (1998 Pg 155)

Cang Zhu, Xiang Fu, Chen Pi, Ban Xia, Kun Bu, Xia Gu Cao, Shan Ci Gu, Jiao Ci, Zhi Ke, Fuling.

Explanation

Cang zhu dries dampness, clears damp from the lower jiao (Bensky 1993 pg 217) similarly *Chen Pi* dries dampness, as well as transforming phlegm (Bensky 1993 pg 232) which is supported by *Ban Xia* which also dries dampness, transforms phlegm, dissipates nodules and reduces distension (Bensky 1993 pg 190) *Xiang Fu and Zhi Ke* move qi and aid the former to reduce distension and pressure caused by phlegm stagnation (Bensky pg 236). *Xia gu cao* (Bensky 1993 pg 60), *Shan Ci Gu*, (Bensky pg 456), *Zao Jiao Ci* dissipate nodules, dispels phlegm, and dissipate clumps (Bensky 1993 pg 197). *Kun Bu* aids the former herbs by eliminating phlegm, but also by leeching dampness through urination (Bensky 1993 pg 185) as does *Fuling* (Bensky 1993 pg 132).

Individual herb analysis

Cang zhu acrid, bitter, warm, aromatic enters pi and Wei (st) to dry dampness, strengthens pi, expel wind dampness, clear damp from the lower jiao, induce sweating and release exterior disorders (Bensky 1993 pg 217)

Xiang Fu acrid, slightly bitter, slightly sweet, neutral enters Gan, san jiao jing luo to course Gan qi and regulate menstruation (Bensky 1993 pg 236).

Chen Pi acrid, bitter, warm, aromatic enters fei, pi and wei (st) to regulate qi, improve pi's transportative functions, adjust the middle, dry dampness, and transform phlegm (Bensky 1993 pg 232)

Ban Xia acrid, warm, toxic enters fei, pi and wei (st) to dry dampness, transform phlegm, harmonise wei (st), stop vomiting, dissipate nodules and reduce distension (Bensky 1993 pg 190)

Kun Bu salty and cold enters Shen (kids), Gan, Wei (st) to reduce phlegm, promote urination, and reduce swelling (Bensky 1993 pg 185)

Xia Gu Cao bitter, acrid, cold enters Gan and Dan to clear Gan, brightens the eyes, clear heat, and dissipates nodules (Bensky 1993 pg 60).

Shan Ci Gu sweet, cold, slightly toxic enters Gan and Wei (st) to clear heat, relieve fire toxicity, and dissipate nodules (Bensky pg 456).

Zao Jiao Ci acrid, warm, slightly toxic enters Da Chang, Fei to dispel phlegm, open the orifices, revive the spirit, dissipate clumps, reduce swellings (Bensky 1993 pg 197).

Zhi Ke bitter, cool enter Pi/Wei jing luo moves qi and reduces distension and pressure (Bensky pg 236).

Fuling sweet, bland, neutral enters Xin, Pi, Fei to promote urination and leach dampness, tonify Pi, transform phlegm and harmonise the middle jiao as well as calming shen (Bensky 1993 pg 132).

Appendix 4

Zhang En-qin Shen (kids) xu formula Zuo Gui Wan Jia Jian to tonify essence and scatter nodulation Flaws (1998 Pg 155).

Shu Di Huang, Lu Jiao Jiao, Tu Si Zi, Fu Pen Zi, Gou Ji, Hu Lu Ba, Xian Ling Pi (Yin Yang Huo), Huang Jing, Xia Gu Cao,

Explanation:

Shu Di Huang tonifies xue and essence, as does *Lu Jiao Jiao* nourishes and tonifies essence and xue (Bensky 1993 pg 327, 337). *Huang Jing and Tu Si Zi* supports the former by tonifying Shen (kids) and nourishing essence (Bensky 1993 pg 326, 350). *Gou Ji* tonifies Shen (Kids) and Gan (Bensky 1993 pg 348) as does *Fu Pen Zi*, as well as assisting the yang (Bensky 1993 pg 388), which is further tonified and warmed by *Hu Lu Ba* and *Xian Ling Pi* (Bensky 1993 pg 341, 343) balancing the Shen (kids) yin tonifying herbs appropriately. Finally *Xia Gu Cao* clears any heat from stagnation and dissipates nodules (Bensky 1993 pg 60).

Individual Herb analysis:

Shu Di Huang sweet, slightly warm enters Xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Lu Jiao Jiao sweet, salty, slightly warm nourishes and tonifies essence and xue, and stops bleeding (Bensky 1993 pg 337)

Tu Si Zi is acrid, sweet, neutral and enters Shen (kids) and Gan jing tonifies Shen (kids), augments yin, and secures essence. Tonifies Gan and Shen (kids) yin. Benefits Pi and Shen (kids) yang qi (Bensky 1993 pg 350).

Fu Pen Zi sweet, astringent, slightly warm enters Shen (kids), gan to augment and stabilise Shen (kids), assist yang and improve vision (Bensky 1993 pg 388),

Gou Ji bitter, sweet, warm enters Shen (Kids), Gan to tonify then both and strengthens sinews and bones, expels wind damp, stabilises Shen (kids) (Bensky 1993 pg 348)

Hu Lu Ba bitter, warm enters Shen (kids), and Gan to warm Shen (kids), disperse dampness/cold and alleviate pain (Bensky 1993 pg 343)

Xian Ling Pi (Yin Yang Huo) is acrid, warm and enters the Shen (kids) and Gan jing luo. It tonifies Shen (kids) yang, expels wind damp cold, tonifies both yin and yang to restrain Gan yang rising (Bensky 1993 pg 341).

Huang Jing, sweet, neutral enters Shen (kids), Fei, Pi to tonify Pi qi, moisten Fei, tonify Shen (kids) and augment essence (Bensky 1993 pg 326).

Xia Gu Cao bitter, acrid, cold enters Gan and Dan to clear Gan, brightens the eyes, clear heat, and dissipates nodules (Bensky 1993 pg 60).

Appendix 5**Bu Shen Fang (kidney supplementing formula) (Flaws 1998 pg 122)**

Zi Shi Ying, Chuan Jiao, Ba Ji Tian, Gou Qi Zi, Tu Si Zi, Chuan Duan, Rou Cong Rong, Shu Di Huang.

Explanation

Zi Shi Ying warms the womb in cold xu infertility (Bensky 1998 pg 402) as does *Rou Cong Rong* (Bensky 1993 pg 339). *Chuan Jiao* and *Ba Ji Tian* support the former by warming yang to disperse xu cold (Bensky 1993 pg 304, 342). *Gou Qi Zi*, *Tu Si Zi*, *Shu Di Huang* support yin and xue following the principle of tonifying both yin and yang of Shen (kids) to achieve a proper balance (Bensky 1993 pgs 327, 333, 350). *Chuan Duan* differs slightly in that it tonifies Shen (kids) and Gan, as well as promoting the movement of xue (Bensky 1993 pg 349).

Individual herb analysis

Zi Shi Ying sweet, warm enters Xin, Gan to sedate Xin, warm Fei, direct qi downward, and warms the womb (Bensky 1998 pg 402).

Chuan Jiao acrid, hot, toxic, enters Shen (kids), Pi, Wei (st) to warms the middle jiao, disperse cold, and alleviate pain (Bensky 1993 pg 304).

Ba Ji Tian acrid, sweet, warm and enters the Shen (kids) and Gan to tonify Shen (kids) and fortify yang, strengthen sinews and bones, disperses wind and expel damp cold (Bensky 1993 pg 342).

Gou Qi Zi sweet, neutral enters Gan, Fei, and Shen (kids) jing luo to nourish Gan And Shen (kids) yin, as well as benefiting essence (Bensky 1993 pg 333).

Tu Si Zi is acrid, sweet, neutral and enters Shen (kids) and Gan jing luo tonifies Shen (kids), augments yin, and secures essence (Bensky 1993 pg 350).

Chuan Duan (Xu Duan) bitter, acrid, slightly warm enters Shen (kids) and Gan jing luo to tonify Shen (kids) and Gan, and strengthens sinews and bones, as well as promoting the movement of xue (Bensky 1993 pg 349).

Rou Cong Rong Tonifies and strengthens yang. Warms the womb, and moistens the intestines (Bensky 1993 pg 339).

Shu Di Huang sweet, slightly warm enters Xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Bu Shen Shu Gan Fang (kidney supplementing, liver coursing formula)

As above plus *Chai hu, Xiang fu, Zhi ke, Ye jiao teng.*

Appendix 6

Professor Yu Jins (1998 pg 61) Prescription for PCOS

Shu Di Huang 12g, Shan Yao 12g, Huang Jing 12g, Yin Yang Huo 12g, Bu Gu Zhi 12g, Chuan Shan Jia 9g, Zao Jiao Ci 12g, Chuan Bei Mu 12g, Dang Gui 12g, Tao Ren 12g.

Explanation:

Shu Di Huang, Dang Gui, Shan Yao, Huang Jing tonifies xue, and augments essence. More specifically *Shu Di Huang* tonifies xue and essence (Bensky 1993 pg 327) *Shan Yao* tonifies and augments Pi and Wei (st) and supports the former by tonifying yin and yang of the Shen (kids) as well as binding essence (Bensky 1993 pg 320). *Huang Jing* enters tonify Shen (kids) and augments essence (Bensky 1993 pg 326). *Dang Gui* has a tonifying/ invigorating and harmonising action on xue (Bensky 1993 pg 329), hence aiding the work of *Chuan Shan Jia, and Tao Ren*, which eliminate xue stasis, and unblock menstruation (Bensky 1993 pg 279, 291). As well as tonifying essence/yin/xue Professor Yu Jin would seem to follow the principle of balancing the prescription with Shen (kids) yang tonifying herbs such as *Xian Ling Pi (Yin Yang Huo)*, and *Bu Gu Zhi* acrid/ warm tonify/ warm Shen (kids) yang. *Yin Yang Huo* tonifies both yin and yang (Bensky 1993 pg 341), whilst *Bu Gu Zhi* stabilises essence (Bensky 1993 pg 345). The last two herbs *Zao Jiao Ci and Chuan Bei Mu* dispel phlegm, dissipate clumps, and reduce swellings (Bensky 1993 pg 197). Additionally *Chuan bei mu* clears heat (Bensky 1993 pg 177).

Individual herb analysis

Shu Di Huang sweet, slightly warm enters xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Shan Yao sweet, neutral enters Shen (kids) Fei, Pi. Tonifies and augments Pi and Wei (st). Tonifies Fei qi. Tonifies shen and stabilises and binds. Benefits yin and yang of the Shen (kids). Binds essence (Bensky 1993 pg 320).

Huang Jing sweet, neutral enters Shen (kids), Fei, Pi to tonify Pi qi, moisten Fei, tonify Shen (kids) and augment essence (Bensky 1993 pg 326).

Xian Ling Pi (Yin Yang Huo) is acrid, warm and enters the Shen (kids) and Gan jing luo. It tonifies Shen (kids) yang, expels wind damp cold, tonifies both yin and yang to restrain Gan yang rising (Bensky 1993 pg 341).

Bu Gu Zhi acrid, bitter, very warm enters Shen (kids), Pi to tonify Shen (kids) yang, stabilise essence, warm Pi yang, and aid Shen (kids) to grasp qi (Bensky 1993 pg 345)

Chuan Shan Jia salty, cool enters Gan, Wei (st) to disperse xue stasis, unblock menstruation, reduce swelling, discharge pus, and expel wind dampness from the jing luo (Bensky 1993 pg 291).

Zao Jiao Ci acrid, warm, slightly toxic enters Da Chang, Fei to dispel phlegm, open the orifices, revive the spirit, dissipate clumps, reduce swellings (Bensky 1993 pg 197).

Chuan Bei Mu bitter, sweet, slightly cold, enters Xin, Fei to clear heat and transform phlegm, and dissipate nodules (Bensky 1993 pg 177).

Dang Gui, sweet, and warm enters Gan, Xin, Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue (Bensky 1993 pg 329).

Tao Ren is bitter, sweet, neutral enters Xin, Da Chang, Gan and Fei to eliminate xue stasis and moisten and unblock the intestines (Bensky 1993 pg 279).

She uses modifications for cold: add *Fu Zi 9g*, and *Rou Gui 3g*.
Individual herb analysis

In cases of xu cold *Fu Zi 9g*, and *Rou Gui 3g* are added to the above prescription
Explanation: Both herbs acrid, hot, enter Xin, Shen (kids), to restore devastated yang, warm, disperse cold and warms the jing luo to alleviate pain (Bensky 1993 pg 298, 302).

Fu Zi acrid, hot toxic enters Xin, Shen (kids), Pi to restore devastated yang, warm and lead back yang to ming men, disperses cold and warms the jing luo to alleviate pain (Bensky 1993 pg 298).

Rou Gui acrid, sweet, hot enters Xin, Shen (kids), Gan, Pi to warm Shen yang leads floating yang back to source, disperses deep cold, warms and unblocks the jing luo (Bensky 1993 pg 302)

And with constrained Gan qi she removes *Zao Jiao Ci*, and *Chuan Bei Mu* and adds *Mu Dan Pi 9g*, *Zhi Zi 12g*, *Chai Hu 6g*, and *Qing Pi 6g*.

Explanation:

She has removed the phlegm reducing herbs in favour of adding more qi/xue moving herbs, with an emphasis on cooling function hence quenching heat from an over expanded Gan. Having said that these additions are still working to reducing phlegm/and or damp, and specifically go to Gan whereas the subtractions do not. ***Mu Dan Pi*** enters Gan to clear heat from stasis, and cools xue, clears yin xu heat as well as invigorating xue, and dispelling xue stasis (Bensky 1993 pg 70) ***Zhi Zi*** also enters Gan and three jiao's to clear heat, drains damp heat, cool xue (Bensky 1993 pg 58). ***Chai Hu*** spreads Gan qi and Raises yang Qi (Bensky 1993 pg 49) ***Qing Pi*** spreads Gan qi, dissipates clumps, reduces food stagnation, dries dampness, and transforms phlegm (Bensky 1993 pg 233). (Professor Yu Jin 1998 Pg 61).

Individual herb analysis

Mu Dan Pi acrid, bitter, cool enters Xin, Gan, Shen (kids) to clear heat, cool xue, clear yin xu heat, invigorate xue, dispel xue stasis, clear upward moving yang, and drain pus reducing swelling (Bensky 1993 pg 70)

Zhi Zi bitter, cold enters Xin, Gan, Fei, Wei (st), San Jiao to clear heat, eliminate irritability, drain da mp heat, cool xue, stop bleeding, reduce swelling and move xue stasis in trauma (Bensky 1993 pg 58)

Chai Hu bitter, acrid, cool enters Dan, Gan, pericardium, and San Jiao to resolve lesser yang disorders, reduce fever, and spread Gan qi. Raise yang Qi (Bensky 1993 pg 49)

Qing Pi bitter, acrid, warm, enters Dan, Gan, Wei (st) to spread Gan qi, dissipates clumps, reduce food stagnation, dries dampness, transforms phlegm (Bensky 1993 pg 233).

Appendix 7**Yu Huang presents the formula Yu Shi Wen Bu Fang**

Shu Di Huang, Huang Jing, Xian Ling Pi, Xian Ling Pi (Yin Yang Huo), Bu Gu Zhi, Chuan Shan, Zao Jiao Ci.

Explanation:

Shu Di Huang tonifies xue and essence (Bensky 1993 pg 327). *Huang Jing* augments the former by tonifying Shen (kids) and augmenting essence (Bensky 1993 pg 326). *Xian Ling Pi (Yin Yang Huo)* and *Bu Gu Zhi* balance these two yin nurturing herbs by warming Shen (kids) and stabilising essence (Bensky 1993 pg 345). *Chuan Shan Jia* disperses xue stasis, unblocks menstruation (Bensky 1993 pg 291). Finally *Zao Jiao Ci* is used here to dispel phlegm (Bensky 1993 pg 197).

Individual Herb analysis:

Shu Di Huang sweet, slightly warm enters Xin, Shen (kids), Gan and tonifies xue and essence (Bensky 1993 pg 327).

Huang Jing sweet, neutral enters Shen (kids), Fei, Pi to tonify Pi qi, moisten Fei, tonify Shen (kids) and augment essence (Bensky 1993 pg 326).

Xian Ling Pi (Yin Yang Huo) is acrid, warm and enters the Shen (kids) and Gan jing luo. It tonifies Shen (kids) yang, expels wind damp cold, tonifies both yin and yang to restrain Gan yang rising (Bensky 1993 pg 341).

Bu Gu Zhi acrid, bitter, very warm enters Shen (kids), Pi to tonify Shen (kids) yang, stabilise essence, warm Pi yang, and aid Shen (kids) to grasp qi (Bensky 1993 pg 345)

Chuan Shan Jia salty, cool enters Gan, Wei (st) to disperse xue stasis, unblock menstruation, reduce swelling, discharge pus, and expel wind dampness from the jing luo (Bensky 1993 pg 291).

Zao Jiao Ci acrid, warm, slightly toxic enters Da Chang, Fei to dispel phlegm, open the orifices, revive the spirit, dissipate clumps, reduce swellings (Bensky 1993 pg 197).

If there is fear and chill he adds Fu Zi, Rou Gui.**Individual Herb analysis:**

Fu Zi acrid, hot toxic enters Xin, Shen (kids), Pi to restore devastated yang, warm and lead back yang to ming men, disperses cold and warms the jing luo to alleviate pain (Bensky 1993 pg 298).

Rou Gui acrid, sweet, hot enters Xin, Shen (kids), Gan, Pi to warm Shen yang leads floating yang back to source, disperses deep cold, warms and unblocks the jing luo (Bensky 1993 pg 302)

For Gan depression, add *Mu Dan Pi, Zhi Zi, Chai Hu, Dang Gui, Qing Pi.*

Individual Herb analysis:

Mu Dan Pi acrid, bitter, cool enters Xin, Gan, Shen (kids) to clear heat, cool xue, clear yin xu heat, invigorate xue, dispel xue stasis, clear upward moving yang, and drain pus reducing swelling (Bensky 1993 pg 70)

Zhi Zi bitter, cold enters Xin, Gan, Fei, Wei (st), San Jiao to clear heat, eliminate irritability, drain da mp heat, cool xue, stop bleeding, reduce swelling and move xue stasis in trauma (Bensky 1993 pg 58)

Chai Hu bitter, acrid, cool enters Dan, Gan, pericardium, San Jiao to resolve lesser yang disorders, reduce fever, and spreads Gan qi. Raise yang Qi (Bensky 1993 pg 49)

Qing Pi bitter, acrid, warm, enters Dan, Gan, Wei (st) to spread Gan qi, dissipates clumps, reduce food stagnation, dries dampness, and transforms phlegm (Bensky 1993 pg 233).

Dang Gui, sweet, and warm enters Gan, Xin; Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue (Bensky 1993 pg 329).

Appendix 8
Long dan xie Gan Tang

Long Dan Cao, huang qin, zhi zi, mu tong, che qian zi, ze xie, chai hu, sheng di huang, dang gui, gan cao.

Long Dan Cao bitter, cold, enters gan, dan, wei (st) Drains damp heat from gan and dan, drains gan fire, and clears damp heat in gan and dan jing luo (Bensky 1993 pg 81)

Huang Qin bitter, cold enters dan, da chang, fei, wei (st) clears and drains fire especially in the upper burner, and clears heat and dampness in wei (st) and da chang, stops bleeding, calms fetus, sedates gan yang (Bensky 1993 pg 75-6)

Zhi Zi bitter, cold enters Xin, Gan, Fei, Wei (st), San Jiao to clear heat, eliminate irritability, drain da mp heat, cool xue, stop bleeding, reduce swelling and move xue stasis in trauma (Bensky 1993 pg 58)

Mu Tong bitter, cool, enters pang guang, xin, promotes urination and drains heat from the heart via the small intestine, promotes lactation and unblocks the blood vessels (Bensky 1993 pg 136)

Che qian zi sweet, cold enters bladder, shen (kds), gan, fei. Promotes urination and clears heat, solidifies the stool, clears the eyes, expels phlegm and stops cough (Bensky 1993 pg 141-2)

Ze Xie sweet, bland, cold enters shen (kids) and bladder. Promotes urination and leaches dampness, drains shen (kids) fire (Bensky 1993 pg 145-6)

Chai Hu bitter, acrid, cool enters Dan, Gan, pericardium, San Jiao to resolve lesser yang disorders, reduce fever, and spreads Gan qi. Raise yang Qi (Bensky 1993 pg 49)

Shen di huang sweet, bitter, cold enters xin, shen (kids), gan. Clears heat and cools xue, nourishes yin and generates fluids, cools xin fire blazing (Bensky 1993 pg 68)

Dang Gui, sweet, and warm enters Gan, Xin; Shen (kids) tonifies xue, and regulates the menses, as well as invigorating and harmonising xue (Bensky 1993 pg 329).