

ENDOMETRIOSIS

WESTERN MEDICAL PERSPECTIVE

Definition

Endometriosis is a condition resulting from the presence of actively growing and functioning endometrial tissue in locations outside the uterus. The areas where endometriosis may occur are widespread and usually multiple. They include:

- the ovaries
- uterine wall
- Fallopian tubes
- abdominal scars
- umbilicus
- sigmoid colon
- rectum
- ureters
- bladder
- vagina

Occurrence

The incidence of endometriosis is currently on the increase. The following groups may be affected by it:

- women between the ages of 25-40 who have not had children
- teenagers (previously not thought to be commonly affected)
- women who have undergone elective tubal sterilization
- familial incidence (7% relative risk of developing it if a first-degree female relative has it)
- there seems to be a correlation between endometriosis and the use of tampons, intercourse during menstruation and the use of the intrauterine contraceptive device (the coil)

Aetiology

Although many theories exist, the pathogenesis of endometriosis is still not fully understood in the Western medical world. The following are some of the most common theories:

- **retrograde menstruation and tubal reflux:** proposed by Samson who believed that menstrual blood was forced out along the fallopian tubes into the peritoneal cavity. He suggested that menstrual blood contains fragments of endometrium which may implant on pelvic structures and grow. Excessive uterine contractions characteristic of primary dysmenorrhoea (often present in women with endometriosis) may contribute to a bidirectional menstrual flow from the uterus.
- **celomic metaplasia:** proposed by Meyer and Ivanoff who suggested that all tissues in which endometriosis arises are embryologically derived from celomic epithelium, i.e. peritoneal cells change into endometrial tissue. Chronic irritation of the peritoneum by menstrual blood may cause celomic metaplasia, which can subsequently result in endometriosis.
- **direct implantation:** according to this theory, endometrial tissues are displaced into an implant in the new sites. This explains why endometriosis may be found in surgical scars.
- **genetic and immunologic factors:** there is a 5.8 percent familial incidence among immediate female siblings, an 8.1 percent risk if the mother had endometriosis and a 7 percent risk if a female sibling has endometriosis. These figures suggest a polygenic and multifactorial inheritance for endometriosis.
- **lymphatic dissemination:** Halban suggested that normal endometrium might "metastasize" via lymphatic channels and thus spread to extrauterine sites where implantation and growth would produce the characteristic lesions of endometriosis.
- **vascular theory:** this theory was proposed by Navratil who suggested that normal endometrium was deported via the veins to remote areas of the body.

Pathology

There are three diagnostic histologic features of endometriosis. They are:

- endometrial glands
- endometrial stroma
- evidence of haemorrhage

The typical lesion will show an abundance of inflammatory cells and fibrous connective tissue.

Ovarian endometriosis occurs in the form of small superficial deposits on the surface of the ovary or as larger cysts which may be up to 10cm in size (known as endometriomas or "chocolate cysts" and which may rupture. In the ovary, the process is almost always bilateral. There is usually considerable fibrosis and puckering of the ovarian surface in the region of the cyst as well as adherence to neighbouring structures.

In the other most frequently involved areas, i.e., throughout the pelvic peritoneum, the lesions are normally smaller and more numerous and are surrounded by dense, fibrous scar tissue.

Clinical manifestations

The most commonly seen symptoms and signs of endometriosis are as follows:

- I. dysmenorrhoea (severe pain beginning before menstruation and continuing almost to the end)
- II. pelvic pain
- III. lower backache radiating to the anterior thigh
- IV. heavy periods
- V. irregular bleeding
- VI. infertility (since inflammation, scar tissue and adhesions in the pelvis may obstruct the passage of an egg along the fallopian tube)
- VII. dyspareunia
- VIII. pain sometimes accompanied by nausea and vomiting or diarrhoea
- IX. pain on defecation
- X. rectal pressure
- XI. tender and enlarged ovaries
- XII. pelvic nodularities and thickenings

It is important to note, however, that 30-35% of patients with endometriosis do not suffer any pain or discomfort, though they may suffer from other manifestations such as infertility or pelvic masses. Also, there is no direct correlation between the severity of the pain and the extent of endometriosis: thus, a woman with advanced endometriosis may suffer less pain than a woman with the beginning stages of the disease.

Diagnosis

Diagnosis of endometriosis is made principally by taking a clinical history. If it is suspected, confirmation is usually obtained by laparoscopy which shows endometriotic cysts and deposits. Definitive diagnosis can be made by microscopic examination of excised tissue that demonstrates both glands and stroma.

Diagnosis is, however, fraught with difficulties and is affected by subjectivity. Laparoscopy relies entirely on the visual and very subjective assessment of the pelvis by the operator and consequently is prone to misinterpretation and subjectivity. Another difficulty is that the

symptoms of endometriosis are very similar to those of other diseases, e.g. pelvic inflammatory disease, ovarian tumours and irritable bowel syndrome making differential diagnosis problematic.

CHINESE MEDICINE PERSPECTIVE

Aetiology

Intercourse during menstruation

When a woman becomes sexually aroused, the Minister Fire goes upwards. If this happens when menstrual blood is flowing downwards, the two will "meet", blocking each other and therefore leading to stagnation of Qi and Blood in the Uterus.

Excessive physical work or exercise

Excessive physical work or exercise can weaken the Spleen, Liver and the Kidneys and adversely affect the Chong and Ren Mai. This is especially the case during puberty when the Chong and Ren Mai are in a state of change and not yet fully developed. Depending on the constitution of the girl, excessive physical work or exercise will either weaken these two vessels or cause stagnation.

Excessive exercise, especially at puberty, during the period or when pregnant, will weaken the Spleen and Kidneys possibly leading to a whole host of problems including a deficiency of Yin, Yang, Qi or Blood and stagnation of Qi and Blood.

External Cold

Women are particularly prone to invasion of Cold just before, during and just after the period, as well as just after childbirth. When Cold invades the Uterus, it contracts causing Blood to stagnate.

Tampons

Tampons block the normal downward flow of menstrual blood thereby leading to stagnation of Blood.

Too early sexual activity

Too early sexual activity (i.e. during puberty) damages the Chong and Ren Mai and renders the Uterus more vulnerable to Blood stasis later in life.

Pathology

The Western disease entity of "endometriosis" broadly corresponds to the Chinese disease-symptom of "Painful Periods": in other words, the pathology, patterns and treatment for Painful Periods is applicable to endometriosis. However, there is an important difference. It is generally agreed by all Chinese gynaecologists that in endometriosis there is always Blood stasis and that endometriosis should be treated as "Abdominal Masses" in Chinese gynaecology. In other words, the endometrial lesions should be considered a form of abdominal masses even though they are not palpable. The important implication of this is that, in the herbal treatment, herbs that "break Blood" and dissolve masses should be chosen.

- I. In endometriosis there is always Blood stasis, but in infertility due to endometriosis there are other factors at play and especially Kidney-Yang deficiency causing a luteal insufficiency. In treatment, place the emphasis on Biao, i.e. Blood stasis only if the period is very painful.
- II. There is always a Kidney deficiency and disharmony of Liver and Spleen
- III. Retention of menses is an important factor, often occurring after childbirth. "Retention of menses" refers to an insufficient discharge of blood during menstruation.
- IV. The temperature chart is flat in endometriosis for two reasons, one due to Biao, the other

to Ben. The temperature does not decrease enough during the period because of Blood stasis (Biao) and it does not increase enough after ovulation due to Kidney-Yang deficiency (Ben).

- V. Yang not growing enough during phase 4 so that Yin pathogenic factors are not expelled (see Winter 2002 Newsletter).
- VI. As modern women have a much higher number of menstrual cycle throughout their lifetime, it means they will have all the more "retention of menses". This is due to earlier menarche, later menopause, fewer children, shorter breastfeeding.

Treatment Principle

- I. Use Tong Xia method (penetrating downwards) to stop pain
- II. To stop pain, calming the Heart is also important
- III. Treat Biao and Ben, i.e. invigorate Blood and tonify the Kidneys
- IV. Invigorating Blood only is not enough. It is far better to regulate the menses according to the 4 phases (see Winter 2002 Newsletter)
- V. Must warm the Uterus even if there are no specific signs of Cold in order to ensure the growth of Yang in phases 3 and 4. Obviously not if there Liver-Fire or Damp-Heat.

Treatment Strategy

- I. Treat Ben by tonifying the Kidneys (Yang or Yin). Important to tonify the Kidneys in 2nd and 3rd phases
- II. Acupuncture treatment to promote ovulation: a) Ren-3 Zhongji, SP-6 Sanyinjiao, KI-12 Dahe; b) Ren-4 Guanyuan, Ren-3 Zhongji, SP-6 Sanyinjiao, Zigong. Start when cervical secretion appears.

Differentiation Of Endometriosis

The main patterns appearing in endometriosis and the relevant remedies are as follows:

- I. Liver-Blood stasis (Stir Field of Elixir, Harmonizing the Moon, Invigorate Blood and Stem the Flow)
- II. Stagnation of Cold in the Uterus (Warm the Menses)
- III. Damp-Heat in the Uterus (Drain Redness)
- IV. Damp-Phlegm in the Uterus (Clear the Palace)
- V. Kidney-Yang deficiency (Unicorn Pearl)
- VI. Kidney-Yin deficiency (Growing Jade)
- VII. Blood deficiency (Precious Sea)

Rather than discussing these patterns one by one, I shall discuss common combinations of patterns seen in practice.

As for the remedies to invigorate Blood listed above, the following are the guidelines for their use:

- I. **Harmonizing the Moon:** this is the main remedy to treat the Biao of endometriosis, i.e. invigorate Blood and dissolve masses. It contains herbs that "break Blood" and dissolve masses. Generally, this remedy is used in phases 4 and 1. However, do not use this remedy if the period is heavy (see below).
- II. **Stir Field of Elixir:** this remedy invigorates Blood and is less strong than Harmonizing the Moon. It is used in phases 4 and 1 and it can replace Harmonizing the Moon in phase 1 if the period is heavy.
- III. **Invigorate Blood and Stem the Flow:** this remedy is used in phase 1 if the period is heavy. Therefore, a common protocol to treat the Biao of endometriosis when the period

is heavy is to use Harmonizing the Moon in phase 4 and Invigorate Blood and Stem the Flow in phase 1.

Combinations Of Patterns

1) KIDNEY-YANG DEFICIENCY WITH BLOOD STASIS AND DAMPNESS

Clinical manifestations

Painful periods, abdominal pain which is relieved by warmth, mid-cycle hypogastric pain, possibly abdominal masses, lower backache, scanty or heavy periods, dark blood with clots, vaginal discharge, feeling cold.

Tongue: Swollen, Pale with Purple sides.

Pulse: Deep-Weak-Slippery-Wiry.

Treatment Principle

1. Menstrual phase: invigorate Blood, eliminate stasis. Harmonizing the Moon.
2. Post-menstrual phase (about 7 days): Warm and tonify Kidney-Yang, tonify Spleen-Qi. Unicorn Pearl.
3. Mid-cycle phase (about 7 days): Warm and tonify Kidney-Yang, tonify Spleen-Qi, resolve Dampness. Clear the Palace or Drain Redness if there is Damp-Heat.
4. Pre-menstrual phase (about 7 days): Invigorate Blood, eliminate stasis, resolve Dampness. Harmonizing the Moon.

2) KIDNEY-YANG DEFICIENCY WITH COLD IN THE UTERUS AND DAMPNESS

Clinical manifestations

Severe abdominal period pain, pain central, pain relieved by the application of heat, menstrual blood scanty with small, dark clots, feeling cold, white vaginal discharge, lower backache, feeling of fullness and heaviness.

Tongue: Pale-Bluish or Bluish-Purple with sticky-white coating.

Pulse: Deep-Weak-Tight.

Treatment principles

1. Menstrual phase (about 5 days): invigorate Blood, eliminate stasis, scatter Cold, warm Yang. Harmonizing the Moon.
2. Post-menstrual phase (about 7 days): tonify and warm Kidney-Yang, tonify Spleen-Qi. Unicorn Pearl.
3. Mid-cycle phase (about 7 days): tonify and warm Kidney-Yang, tonify Spleen-Qi, resolve Dampness. Clear the Palace or Drain Redness if there is Damp-Heat.
4. Pre-menstrual phase (about 7 days): invigorate Blood, eliminate stasis, scatter Cold, resolve Dampness. Harmonizing the Moon.

3) KIDNEY-YIN DEFICIENCY WITH BLOOD STASIS AND DAMPNESS

Clinical manifestations

Painful periods, stabbing or heavy abdominal pain, mid-cycle hypogastric pain, possibly abdominal masses, sore back, scanty or heavy periods, vaginal discharge, dizziness, tinnitus.

Tongue: without coating.

Pulse: Floating-Empty and Slippery-Wiry.

Treatment Principle

1. Menstrual phase (about 5 days): Invigorate Blood, eliminate stasis. Harmonizing the Moon.
2. Post-menstrual phase (about 7 days): nourish Kidney-Yin, tonify Spleen-Qi. Growing Jade.
3. Mid-cycle phase (about 7 days): Nourish Kidney-Yin, tonify Spleen-Qi, resolve Dampness. Clear the Palace or Drain Redness if there is Damp-Heat.

4. Pre-menstrual phase (about 7 days): invigorate Blood, eliminate stasis, resolve Dampness. Harmonizing the Moon.

4) BLOOD STASIS WITH KIDNEY-YANG DEFICIENCY WITH DAMP-PHLEGM IN THE UTERUS

Clinical manifestations

Painful periods, abdominal pain which is relieved by warmth, mid-cycle hypogastric pain, soft and moveable abdominal masses, tingling limbs, dizziness, lower backache, scanty or heavy periods, dark blood with clots, excessive vaginal discharge, feeling cold.

Tongue: Swollen, Pale with Purple sides.

Pulse: Deep-Weak-Slippery-Wiry.

Treatment Principle

1. Menstrual phase: invigorate Blood, eliminate stasis. Harmonizing the Moon.
2. Post-menstrual phase (about 7 days): warm and tonify Kidney-Yang, tonify Spleen-Qi. Unicorn Pearl.
3. Mid-cycle phase (about 7 days): Warm and tonify Kidney-Yang, tonify Spleen-Qi, resolve Dampness and Phlegm. Clear the Palace.
4. Pre-menstrual phase (about 7 days): Invigorate Blood, eliminate stasis, resolve Dampness and Phlegm. Harmonizing the Moon.