Endometriosis

Naturopathic Approaches

by Dr. Evan McCarvill, ND
PO Box 3343
Melfort, Saskatchewan, S0E1A0

What is Endometriosis?
The female reproductive system is a complex thing. And as such, it can be subject to certain complications and disorders that affect quality of life. Dysmenorrhoea, or pain during menstruation, is a common problem. While not necessarily the case, symptoms such as dysmenorrhoea, heavy or irregular bleeding, pelvic pain, pain during exercise, pain during urination and/or defecation, as well as bloating, nausea, and vomiting, can be associated with a certain condition of the female reproductive system known as endometriosis.

Endometriosis occurs when endometrial cells, which normally line the inner wall of the uterus, develop in abnormal locations in the pelvic cavity, such as on the ovaries, on the fallopian tubes, in the vagina, or on the cervix. These cells possess the same hormone receptors as normal endometrial cells, making endometriosis an estrogen-dependent disease, affecting women of menstruating age.

The cells respond to the normal monthly hormone cycle, resulting in microscopic internal bleeding, which in turn leads to the release of inflammatory cell signals called cytokines and prostaglandins, new blood vessel formation, and even fibroid formation. This is how the above-mentioned symptoms begin to occur. It is noteworthy that the condition usually diminishes with the onset of menopause, due to its estrogen-dependent nature.
While not normally life-threatening, the physical symptoms can be severe and debilitating in some cases, and the condition is often associated with infertility, with an incidence of some 20–50% among infertile women.[2][3]

Prevalence
It has been estimated that about 7–10% of the general female population suffers from endometriosis,[4] so it’s a fairly common problem. In fact, this figure may be a significant underestimation, as a confirmed diagnosis usually requires a biopsy or direct visualization of the uterus via exploratory laparoscopy. Usually, it’s women undergoing surgery, or being evaluated for infertility, who receive this kind of testing.

Symptoms vary in severity. About a third of women with endometriosis have no symptoms at all.[5] Therefore, some women may have the condition go undiscovered for years, and thus the true incidence in the population may be greater. Incidence can even be as high as 80% in women with chronic unexplained pelvic pain.[6] One study even showed via laparoscopy that endometriosis could be found in 20–50% of women who had none of the typical symptoms.[7] There appears to be a genetic component, as you are ten times more likely to develop endometriosis if a first-degree relative has it.[8]

Causation
Currently, the causes of endometriosis are poorly understood, though there are some prominent hypotheses, including the notion that retrograde (i.e. backflow) menstruation through the fallopian tubes transports viable endometrial cells and deposits them onto the pelvic organs, where their retained stem-cell properties enable them to survive and grow in these inappropriate locations.

However, while it has also been shown that a majority (90%) of women have retrograde menstruation, indicated by blood being present in the fluid of their abdominal cavities, most of these women do not have endometriosis, so this is not a perfect explanation. Even so, conditions that increase retrograde menstruation, such as defects in the fallopian tubes, also seem to increase the risk of endometriosis, so there still seems to be a connection, even if it’s an imperfect one.[9]

There are likely multiple factors, both genetic and environmental, which are involved in the causation of the condition, which have yet to be elucidated. For instance, some research suggests that an imbalanced immune response to the displaced endometrial tissue may be involved.
Risk and Conventional Treatment
Here are some risk factors for endometriosis:

- Family history of endometriosis;
- Early onset of menses;
- Short menstrual cycles (less than 27 days);
- Long duration of menstrual flow (more than 7 days);
- Heavy bleeding during menses;
- Delayed childbearing, or no childbearing at all;
- Defects in the uterus or fallopian tubes.

Despite the elusiveness of the causes of endometriosis, as of now, the fact that the cells are responsive to hormones is exploited as the mainstay of medical treatment. Usually, this entails suppression of symptoms via hormone administration, such as combination oral contraceptive pills (COCPs), or surgical removal of the offending tissue implants. Usually, surgery is reserved for the most severe cases. Endometriosis brings an increased risk of epithelial ovarian cancer, and it is believed that COCPs can help protect against this risk.[10]

Although adequate symptom relief is experienced by the majority (up to 95% in some studies) of women who undergo medical management by means of hormonal suppression of ovulation, as many as half of them will have a return of symptoms within five years. Thus, to help further support quality of life, or to prevent recurrence of the condition, some natural approaches are worthy of consideration.

Natural Therapies
As described above, the low level of internal bleeding that occurs as endometriosis implants respond to the normal menstrual cycle results in the release of proinflammatory cell signals called cytokines and prostaglandins. The greater the proinflammatory signal that results from such compounds in the body, the greater the associated symptoms of pain and cramping. Thus, taking steps to lower the baseline level of chronic inflammation in the body can help to mitigate this.

Dietary Approaches
One basic way to do this is to eat according to an anti-inflammatory diet. Such a diet is predominantly plant-based, emphasizing fruits, vegetables, whole grains, nuts, fibre,
and sources of omega-3 fatty acids. The Mediterranean type diet, with its high ratio of omega-3 fatty acids to omega-6 fatty acids, is the most effective dietary pattern for reducing inflammation. Also, given how sugars and refined carbohydrates, such as from white-flour breads and pastas, can promote an increased inflammatory state in the body, an anti-inflammatory diet should contain foods with a low glycemic load, emphasizing whole natural foods like fruits, vegetables, nuts, seeds, and berries (high in flavonoids). These foods also tend to be rich sources of phytonutrients that have antioxidant and anti-inflammatory properties that can help quench inflammatory triggers.

In a study on the Mediterranean diet involving 1500 men and 1500 women, the greatest adherence to the diet resulted in significant reductions in inflammatory markers (in 20% lower CRP levels, 17% lower IL-6 levels, 15% lower homocysteine levels, 14% lower white blood-cell counts, and 6% lower fibrinogen levels), compared with those with the least adherence.[11]

It is generally understood that omega-6 fatty acids, common in the Western diet, are proinflammatory to the body, while omega-3 fatty acids are anti-inflammatory. Interestingly, however, research has shown that omega-3 fatty acids have anti-inflammatory effects only when the basic diet is already very high in omega-6s, like the typical western diet. So really, it’s not either/or omega-6 or omega-3 fatty acids that are proinflammatory or anti-inflammatory: Rather, it is the ratio between these two fatty acid groups that is important. The closer the ratio is equal to 1:1, the more anti-inflammatory the diet.[12]

In the old days, people ate more fruits and vegetables, and so got more fibre, more complex carbohydrates, and more polyunsaturated fatty acids, such as omega-3s. The ratio between omega-6 and omega-3 was close to 1:1, but over the last 150 years or so, the typical Western diet now has a ratio closer to 15:1 or 20:1 in favour of omega-6.

Foods rich in omega-6 fatty acids, which are to be avoided or mitigated in the diet, include most factory-farmed meat, wheat, cottonseed oil, sunflower seed oil, corn oil, safflower oil, pumpkin seeds, cashews, and pecans.

Foods rich in omega-3 fatty acids, which are to be encouraged in the diet, include organic free-range, pasture-fed meat; walnuts; Brussels sprouts; cauliflower; flax seed; sardines; salmon; herring; and anchovies.
Candida
There is a potentially related condition known as “Candida overgrowth syndrome.” Essentially, it is an imbalanced overgrowth of a kind of yeast, usually Candida albicans, within the otherwise healthy diversity of microbes living in our intestines.

While no hard research has definitively made this connection, several practitioners have observed that some endometriosis patients experience symptomatic improvement while on an “anti-Candida” program. This usually entails restricting refined carbohydrates and sugars in the diet, in accordance with the dietary principles discussed above, as well as antifungal medicines, prescription or otherwise.[13: 133–143]

It is not clear, based on this information, whether an anti-Candida approach directly reduces endometriosis or if the benefits are simply the result of an overall improvement of health. Regardless, it is worth consideration.

Herbal Therapies
Be advised: Please consult your health-care provider before beginning any program involving supplementation or herbal therapies, especially if you are already taking prescription medications, which may have the potential for interactions.

In mild to moderate cases of endometriosis, herbal therapy has a lot to offer. Herbal medicine categories that are relevant include the following.

Cramp bark: Known scientifically as Vitex agnus-castus, this herb is a normalizer of female sex hormones and pituitary gland function. It tends to up-regulate progesterone, while down-regulating estrogen. It is very useful for premenstrual symptoms as well as for rebalancing hormone activity after oral-contraceptive use.

Black cohosh: Known scientifically as Cimicifuga (or Actea) racemosa, this herb serves as a relaxing uterine tonic as well as a normalizer of female hormones, showing in rat studies the ability to lower serum luteinizing hormone (LH), which is also a goal in conventional treatment of endometriosis, as well as the ability to bind estrogen receptors. It competes with regular estrogen to bind with receptors, but binds them more weakly
than actual estrogen. Thus, it effectively mitigates any excessive estrogen stimulation that may be contributing to symptoms. Black cohosh is useful in cases of hot flashes and premenstrual syndrome symptoms, as well as being indicated for endometriosis symptoms. It is contraindicated in case of pregnancy, lactation, and estrogen-dependent tumours.

**Wild yam:** Known scientifically as *Dioscorea villosa*, this herb is a source of raw material for the manufacture of synthetic contraceptive hormones and corticosteroids. As such, it naturally has hormone-normalizing, antispasmodic, as well as anti-inflammatory properties. It is indicated in cases of menstrual pains, ovarian and uterine pains, and even pains of pregnancy. Large doses should be avoided during pregnancy, except under the supervision of a skilled practitioner. It is also contraindicated in case of cancer.

**Conclusion**

If you suffer from endometriosis, or if you know someone who does, I hope this has helped you gain some insight into the nature of the condition and some of the options you have to prevent or manage it.

**References**