# Endometriosis

## What every woman should know

by Dr Dharshini Gopalakrishnakone

Felicity is a 35-year-old patient who came in to our clinic last year with complaints of very painful periods for the past seven years. She also noted that the painkillers she previously took to relieve the discomfort was no longer adequate. Felicity had also been trying to get pregnant with no success over the past four years. After a thorough examination and investigation, she was diagnosed with moderate endometriosis. She successfully underwent treatment, conceived naturally without any fertility drugs, and is now a proud mother of a 3-month-old infant.

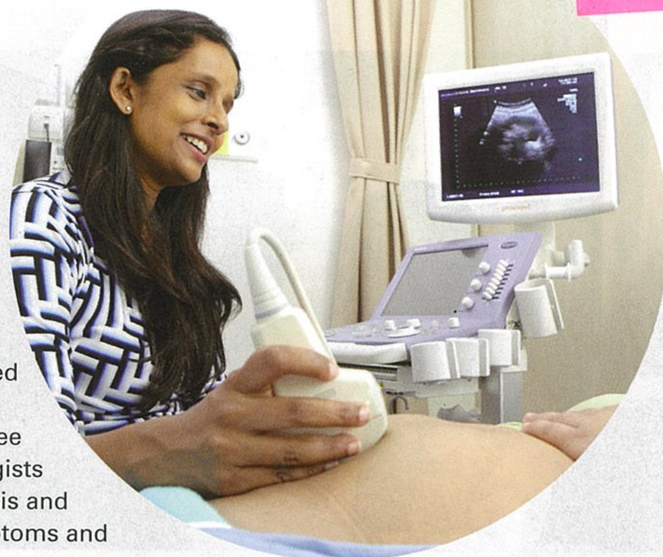
### What is endometriosis and what causes it?

Every month, a woman's ovaries produce hormones that tell the lining of the womb to get thicker. The womb (uterus) then sheds these cells (called endometrial cells) along with blood and tissue through the vagina when a woman has her period.

Endometriosis occurs when these endometrial cells grow outside the uterus in other parts of your body.

The cause is actually unknown but several theories have been put forward and the most widely accepted theory is that of 'retrograde menstruation'. According to this theory, during menses some of the menstrual blood flows backwards into the pelvis through the fallopian tubes. This menstrual blood contains endometrial cells from the womb lining which proceed to implant over areas and organs within the pelvis.

This sticky chocolate-looking tissue may attach on the inner lining of the pelvis, ovaries, bowel, rectum, bladder and many other areas.



These sticky growths stay in the body. Like the other endometrial cells in the womb lining, these growths react to the hormones from the ovaries. They grow and bleed during the menstrual perios and can get bigger. These growths (called endometriotic deposits) in the body, are what lead to inflammation, painful periods, scarring of pelvic organs and other symptoms related to endometriosis.

Endometriosis is actually quite common. It is estimated to affect 20% to 30% of women in the reproductive age group. It may run in some families and it is common to see mothers referring their daughters to see their gynaecologists after seeing them suffer similar symptoms. Early diagnosis and intervention may help young women alleviate their symptoms and increase their chances of getting pregnant as well.

Endometriosis is not cancer.

## What are the symptoms of endometriosis?

The signs or symptoms of endometriosis include:

- Painful and or heavy periods (abdominal, pelvic and back pains)
- Painful intercourse (dyspareunia)
- Chronic pelvic pain (pain in the pelvic region not related to menses)
- Infertility (difficulty getting pregnant)
- Other associated symptoms may be: chronic pelvis pain , not related to menses, pre-menstrual spotting
- Bowel symptoms (pain before, during or after opening bowels, blood noted in motion especially during menses, irritable bowel symptoms)
- Bladder symptoms (pain during, before or after passing urine despite not having any evidence urinary infection on investigation, or blood in urine)

There is no connection between the symptoms and severity or extent of endometriosis. Hence, patients with very mild disease may actually have very severe symptoms while those with significant disease may not experience significant symptoms at all. Some women may have no symptoms at all and may be discovered incidentally during diagnostic laparoscopy while being investigated for subfertility.

## Who is at risk of getting endometriosis?

A woman is more likely to develop endometriosis if she:

- Has never given birth
- Has one or more relatives (mother, aunt or sister) with endometriosis
- Has a closed hymen, which blocks the flow of menstrual blood during the period or any medical condition that prevents the normal passage of menstrual flow out of the body
- Has uterine abnormalities

## How is endometriosis diagnosed?

As mentioned before, some women may have no symptoms at all and maybe discovered incidentally only during diagnostic laparoscopy. Pelvic ultrasound scans, blood tests and internal vaginal examinations cannot conclusively diagnose endometriosis. The only way to diagnose endometriosis is by laparoscopy. This is an operation in which a tube (a laparoscope) is inserted into the abdominal cavity through the belly button. The pictures seen by the tube is shown on a big screen in the operation theatre. This allows the surgeon to see the pelvic organs and identify any endometriotic deposits and cysts. Surgical intervention can then proceed if necessary.

## What are the treatment options available for endometriosis?

Unfortunately, there is no cure yet for the condition and it can be difficult to treat. However, certain medical therapies or surgery can help. The type of treatment used depends on the age of the patient, her desire for future childbearing and the severity of her symptoms. Treatment options will be given to relieve pain, slow the growth of endometriosis tissue, improve fertility and to prevent the disease from returning.

Treatment may not be necessary if the symptoms are mild and the patient has no fertility problems or if she is nearing menopause, in which case symptoms may get better without treatment.

### *Treatment for pain relief*

The most commonly dispensed medication for endometriosis is for the purpose of pain relief.

Non-steroidal anti-inflammatories (NSAIDs), such as ibuprofen and naproxen, are usually the preferred painkiller

used to treat the pain associated with endometriosis. It's best to take NSAIDs the day before period pain is expected.

Paracetamol can be used to treat mild pain but is not usually as effective as NSAIDs.

Codeine is a stronger painkiller that's sometimes combined with paracetamol or used alone if other painkillers aren't suitableThis comes in the form of a drug called Panadeine.

However, constipation is a common side effect that may aggravate the symptoms of endometriosis.

### *Hormonal treatments*

The next step to consider is hormonal treatments. This usually involves giving drugs to create a reversible pseudo-pregnancy or pseudo-menopause state which can stop ovulation and hence allow the endometrial tissue to regress and die.

In my clinic, we usually start off with a low dose combined oral contraceptive pill (COCP). The patient should try it for at least three cycles before seeing proper improvement in symptoms. As long as patients are young, non-smokers and have no contraindications to hormone usage, patients can use the COCPs for many years with good relief of symptoms.

The other hormonal options are that of testosterone derivatives (e.g. Danazol and progestogens such as Provera, Norethisterone and Depo-provera).

GnRH analogues are drugs which create a pseudo-menopause state. This group of drugs is given in the form of injections or nose sprays and is usually used only for short durations (e.g. 6 months). The side effects of GnRH analogues include menopausal symptoms such as hot flushes, vaginal dryness and reversible bone loss. Sometime we give patients hormonal tablets in the form of add-back therapy to alleviate these symptoms.

The Mirena coil can also be used to provide relief from some symptoms like heavy menses, along with the menstrual cramps. It is an intra-uterine device easily inserted during a patient's period and lasts for five years.

### *Surgery*

The final frontier in the management of endometriosis is skilled and effective surgery. Studies have shown that for patients with infertility resulting from endometriosis, surgery offers a better chance of achieving pregnancy than medical treatments. Surgery is also advised for severe disease (e.g. large cysts or severe symptoms). The surgery is chosen and performed according to individual patient's needs.

Diagnostic laparoscopy helps to confirm the presence of endometriosis. Therapeutic surgery can also be done at the same occasion to remove pathology that is found. On the other hand, therapeutic laparoscopy helps to restore normal pelvic anatomy and excise endometriotic cysts, nodules and scar tissues. It aims to relieve pain and/or symptoms, and improve fertility. Hydrotubation is a simple procedure where blue fluid is flushed through the fallopian tubes to see if they are potent. In perimenopausal women or in women who already have complete families, a hysterectomy may be performed. MG

**Patient name was changed to protect privacy.*

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*Dr Dharshini is experienced in antenatal ultrasound as well as performing natural childbirth, assisted delivery (vacuum and forceps) and Caesarean-sections. She has extensively trained in gynaecological surgery (hysterectomies, myomectomies, cystectomies), laparoscopic (key-hole) procedures and has a keen interest in hysteroscopic surgeries (a non-invasive procedure to surgically treat small masses within the womb).*