



# Endometriosis

Endometriosis is a chronic inflammatory condition that can affect women of reproductive age. It occurs when endometrial-like tissue (similar to the tissue that lines the uterus (womb)) exists in other parts of the body - most commonly in the pelvis.

During the reproductive cycle, the tissue that lines the uterus (endometrium) thickens in response to release of hormones to prepare to enable a fertilized egg to implant to begin a pregnancy. If this does not happen the lining breaks down and is shed, and a menstrual period occurs.

Endometriosis deposits outside the uterus behave in a similar way during the cycle and so cause pain during a period. The breakdown of the lining involves inflammation, and can be painful.

Endometriosis is:

- common – at least 1 in 10 females have endometriosis
- an oestrogen dependent condition – endometriosis responds to the hormone oestrogen. Oestrogen is produced by the ovary throughout the 'reproductive years', i.e. from the time you start having periods (puberty) to the time your ovaries no longer release hormones (menopause)
- a long-term (chronic) condition - endometriosis rarely goes away without treatment before the menopause. People with endometriosis may require long-term healthcare support.

## What are the signs and symptoms of endometriosis?

The signs and symptoms of endometriosis vary from one person to another. Endometriosis can be found in people with no symptoms. In this situation it does not require treatment.

Keeping a pain or symptom diary can assist in diagnosis.

The common symptoms of endometriosis include:

1. Persistent pelvic pain - People suspected to have endometriosis may experience cyclical pain during menstruation or non-cyclical pain when not menstruating, pain related to sexual intercourse, or pain related to bladder or bowel function (voiding).
2. Fatigue - extreme tiredness resulting from physical illness.
3. Impaired fertility - endometriosis can make it difficult to fall pregnant (sub-fertility, infertility).

## What causes endometriosis?

The causes of endometriosis are not fully understood. Genetic factors influence the development of endometriosis. Having a close relative with endometriosis makes it more likely that a person will develop the condition.

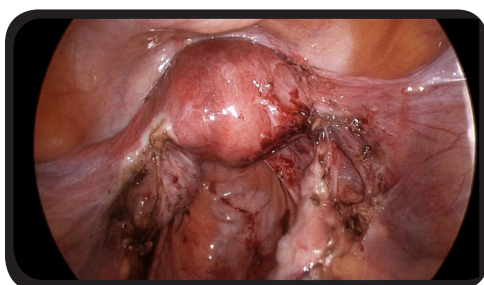


Image: Endometriosis on pelvic organs

## How is endometriosis diagnosed?

A diagnosis of endometriosis is made based on the description of symptoms (symptom diary), plus additional investigations such as:

- clinical examination - when a doctor feels for abnormalities
- ultrasound - an imaging test using high-frequency sound waves
- laparoscopy - a surgical procedure to examine the inside of the abdomen via a thin telescope inserted through a small incision in the wall of the abdomen. If areas of possible endometriosis are seen, samples are taken to confirm the disease.

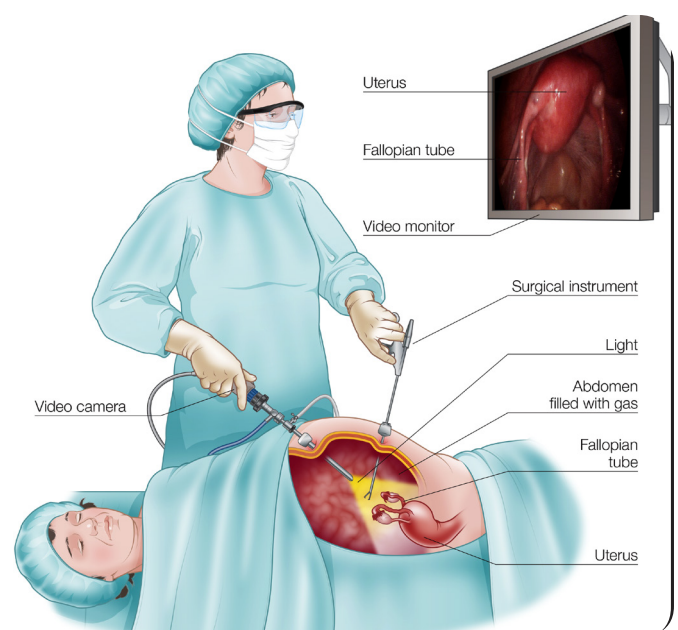


Image: Surgical diagnosis by laparoscopy

## Pain management

Pain is a common symptom of endometriosis. Endometriosis associated pain is very variable. Some patients have endometriosis but no pelvic pain.

Pain is generally not well matched to the visible extent of endometriosis, but may be more closely related to the location of the endometriosis deposits and how deeply into the pelvic tissues the endometriosis extends.

The effective use of pain relief medication (analgesics) is important for people with endometriosis.

Cyclical or menstrual pain can be alleviated with analgesic medication, such as a non-steroidal anti-inflammatory drug (NSAID) alone or in combination with paracetamol. Your doctor may prescribe stronger analgesics, but caution is necessary as undesirable side effects may be experienced with these medications.

Analgesia provides symptomatic relief of pain but it does not treat the underlying endometriosis.

## How is endometriosis treated?

The treatment of endometriosis can over time involve medication and surgery (to remove the endometriosis by laparoscopy). Women who have endometriosis may require both of these treatments at different stages of their lives.

### 1. Hormone-based treatments

Hormone-based treatments that regulate oestrogen are an effective treatment option. They can be used alone, or in combination with surgery (either before or after surgery). Hormone-based therapies:

- slow or suppress the growth of endometriosis
- stop any bleeding, including the menstrual cycle.

All hormonal therapies have equal benefits for treatment of endometriosis, so the choice of hormonal treatment should be made in collaboration with your doctor based on personal circumstances and preferences.

Hormonal therapies include:

#### The combined oral contraceptive pill ('the pill')

Using an oral contraceptive to stop ovulation, the levels of estrogen in the pelvis are reduced and this can help to suppress the activity of endometriosis. Continuous use of the oral contraceptive pill can suppress activity of endometriosis, and reduce the frequency of painful periods.

#### Progestosterone-like hormones

These medications, can be effective against endometriosis activity and are available as tablets, long acting injections (depot injections) or released slowly from an IUD or Mirena.

#### Mirena

Mirena is a small device that is shaped like a T. This is placed in the uterus and releases a progesterone-like hormone. This has been shown to reduce the activity and pain associated with endometriosis over time.

### Gonadotrophin-releasing hormone (GnRH) agonists and antagonists

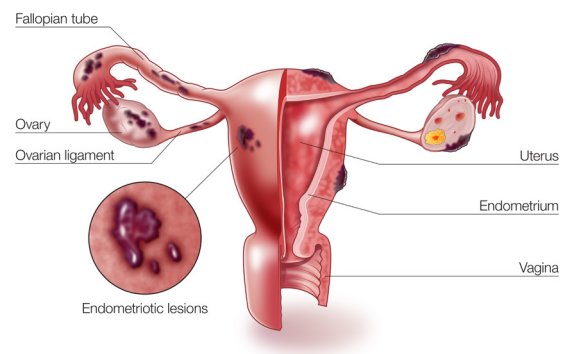
Some implants and sprays can switch off the release of reproductive hormones in women. However, this can induce a menopause-like state that women may find unpleasant. It is unusual to use such medications alone for more than a few months, as there can be long-term side effects.

It is important to realise that the medications used for treatment of endometriosis are commonly contraceptive (they stop pregnancy occurring).

### 2. Alternative therapies

Some people who have endometriosis may prefer non-pharmacological and non-surgical managements to treat their pain. There are many reasons for this, however it is important to note that:

- there is limited evidence on the effectiveness of acupuncture for the management of pain associated with endometriosis.
- there is no evidence to support the use of Chinese herbal medicines or supplements for treating endometriosis. Caution must be exercised with their use.



### 3. Surgery

Surgery is used to treat endometriosis of all degrees and severity. Surgery for endometriosis is generally performed by a minimally invasive approach (laparoscopy) or where this procedure is contra-indicated, an open surgical approach (laparotomy). The surgery depends on the location of the endometriosis. It is important to note that:

- the endometriosis may be burnt off (ablation) or cut (excised) with prior consent. Both ablation and excision of endometriosis are equally effective
- there are possible benefits and risks (complications) of surgery
- the aim is to suppress further endometriosis with hormonal or other treatment to reduce the need for repeated surgery that can lead to scar tissue and related problems.

If you are contemplating having surgery to treat endometriosis, it is important to have a clear understanding of the nature and purpose of any surgery that is planned.