

Endometriosis

Excessive menstrual cramps ?

Abnormal or heavy menstrual flow ?

Pain during intercourse ?

Trouble getting pregnant ?

READ ON if this is you.



WHAT IS ENDOMETRIOSIS ?

This is a general guide – please speak to Dr Burrows about your symptoms.

Endometriosis is a condition that can affect up to 1 in 10 women during the reproductive years. Not everyone has symptoms.

Endometriosis is derived from the word endometrium (the tissue which lines the uterus). Endometriosis is a disease where endometrial type tissue is found OUTSIDE the uterus.

The commonest sites are the

- * ovaries, fallopian tubes
- * uterosacral ligaments
- * on the pelvic walls, and over the ureters (tubes from the kidneys to the bladder)
- * pouch of douglas (area behind the uterus or womb)
- * uterovesical pouch (area in front of the uterus and near the bladder)
- * vagina

(less commonly – upper abdomen, chest, umbilicus, in the scar from a caesarean section)

ENDOMETRIOSIS- Types /appearance

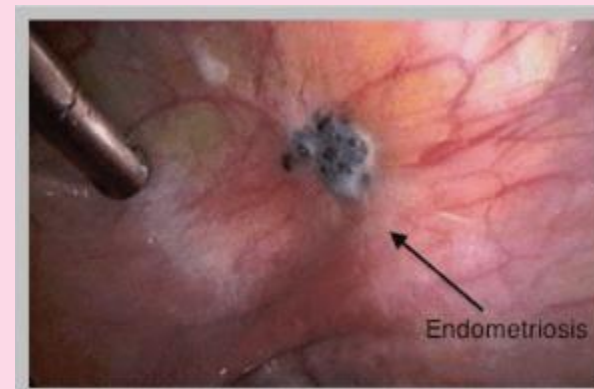
The appearance of this disease on laparoscopy (keyhole surgery) includes patches that are typically black/brown/blue like a blood blister. They can also be white/red/light coloured.

Endometriosis can be an isolated patch, or salt and pepper type sprinkles in many places.

The body reacts to the abnormal tissue by creating an adhesion or scar tissue. This can lead to damage to the structures of pelvic organs in the area.

Types of endometriosis (Based upon the Royal Australian and New Zealand College of Obstetricians and Gynaecologists factsheets – Understanding Endometriosis):

- 1) ENDOMETRIAL IMPLANTS – small 1 -2 mm patches
- 2) ENDOMETRIAL NODUES – 2-3 mm patches
- 3) ENDOMETRIOMAS – these are cysts of the ovary filled with old blood, called chocolate cysts – and can even reach 10 cm in dimension – see picture on the right
- 4) ADENOMYOSIS - endometriosis in the uterine wall



STAGES of ENDOMETRIOSIS

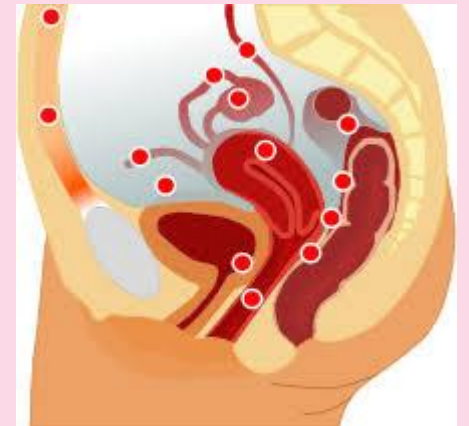
A Staging or Classification System for endometriosis has been developed by the American Society for Reproductive Medicine.

Stage 1 – minimal (small patches no scarring)

Stage 2 – mild

Stage 3 – moderate. This means there are more patches more widely spread. There can be attachment to the ovaries, fallopian tubes, anterior cul-de sac (bladder to uterus) and posterior cul-de sac (uterus to rectum)

Stage 4 – severe. This means there are numerous and large patches with significant scarring; organs such as the bladder, ovaries, and bowel are held down and diseased.



CAUSES OF ENDOMETRIOSIS

The exact cause of endometriosis is unknown – however sisters and daughters of patients diagnosed with endometriosis have a higher incidence. Theories include :

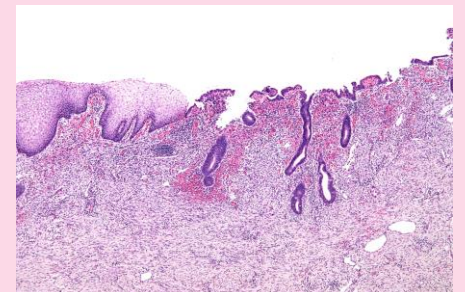
“RETROGRADE MENSTRUATION” theory. During a period some blood will flow back through the fallopian tubes to the pelvic cavity. This will occur naturally in 9 out of 10 women.

In some women, the immune system seems to be less capable of clearing these live endometrial cells.

“SPREAD VIA BLOOD or LYMPHATIC CHANNELS”

“METAPLASIA” This is where the cells are pre-determined from birth to turn into endometriosis

“DIRECT TRANSPLANTATION”. This is the theory behind a patch of endometriosis in a caesarean section scar.



ENDOMETRIOSIS SYMPTOMS

PAIN – is the commonest, especially excessive menstrual cramps. It can be on one or both sides of the lower abdomen, deep in the pelvic cavity, lower back, and the rectum. Whilst 50% of women have pain during a period, the pain is often different if endometriosis is present,

The PAIN can be prolonged, severe enough to interfere with work or social activities and often does not respond to the usual treatment such as the pill or period pain medication from the pharmacy.

DYSPAREUNIA - pain during and after intercourse is a common symptom of endometriosis. It is felt deep in the pelvic area and is worse around period time. The pain seems to be due to pressure on the adhesions (scar tissue) and the active endometriosis (blue – black spots). The pain can often be reproduced by a gentle vaginal examination by the doctor.

BLADDER SYMPTOMS – can occur such as pain with a full bladder, aches and frequency in passing urine. These symptoms are most usually related to bladder problems but can also indicate endometriosis involving the bladder.

NON GYNAECOLOGY CAUSES FOR PAIN NEED TO BE CONSIDERED (not all pelvic pain is endometriosis)

*bowel – irritable bowel syndrome, constipation, inflammatory bowel disease

*bladder – infections, interstitial cystitis

*hormonal period pain issues - prostaglandins and pain hormones can cause pain cramps, diarrhoea, nausea

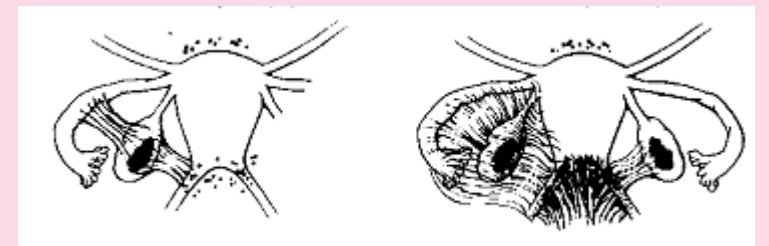
ENDOMETRIOSIS and INFERTILITY

Mild endometriosis is NOT a major cause of infertility, however 30 to 40% of women with endometriosis can have difficulty in getting pregnant.

In mild – moderate cases, the infertility can be temporary. Surgery to treat this endometriosis can restore fertility to remove adhesions, cysts (including chocolate cysts of the ovaries) and scar tissue.

Causes of reduced fertility include

- A physical barrier. Scar tissue can impair the egg release from the ovary, and pick up by the fimbriae (end of the fallopian tube)
- Blocked fallopian tubes –which can be tested for patency with dye studies
- Decreased sperm movement
- Abnormal embryo development



ENDOMETRIOSIS AND NATURAL OUTCOMES



Some women with endometriosis have no symptoms, even with severe endometriosis. On the other hand, a mild case can cause intense pain. Sometimes there is no pain but the condition is diagnosed during infertility testing.

Period pain can be eased by rest, meditation, a warm bath, prevention of constipation, regular exercise, and a hot water bottle.

Studies have estimated that of every 100 women with mild or no symptoms

50% will worsen over time

25% will remain unchanged

25% will improve, shrink or disappear

Pregnancy will improve endometriosis symptoms. This is because no periods occur during pregnancy, (and often whilst breastfeeding) and this will arrest the endometriosis bleeding. It can often cure or lessen the pains after the baby is born, but does not always cure endometriosis.

Menopause typically leads to the cessation of active endometriosis, as oestrogen production declines at this time. If there is a history of severe endometriosis, any menopausal hormone therapy needs to be tailored to less recurrent endometriosis.

HOW IS ENDOMETRIOSIS DIAGNOSED?



The diagnosis is difficult due to the wide variety in symptoms. The only way of diagnosing the condition with certainty is with an examination of the inside of the pelvic cavity using a telescope called a laparoscope.

The laparoscopy is a minor surgical procedure where a thin tube with a camera at the end, is inserted into the abdomen through a small incision. This requires a day admission to hospital and a light anaesthetic. At the time of the surgery, sometimes a tissue sample is sent for pathology, and usually surgical treatment (removal of endometriosis) is performed at the same time. Please see LAPAROSCOPY on my web page under educational videos.

Prior to this the gynaecologist will take a full medical history, examination, ultrasound, CT scan and pelvic examination could assist. In addition, other causes for pain will be excluded or explored.

In some cases a formal (laparoscopy) diagnosis is not required. This can be where the woman's symptoms respond to pain relief, and hormone treatment for endometriosis such as the oral contraception pill or progestogens (mini – pill, Mirena intra uterine device, implanon or depot provera).

ENDOMETRIOSIS TREATMENT OPTIONS

FACTORS TO CONSIDER INCLUDE :

- Your general health and history, as well as your personal preferences
- Tolerance of prior medications procedures and therapies
- Current symptoms and concerns
- The extent of disease (if a laparoscopy has been performed)
- Your age, and desire and time frame to start a family

ORAL CONTRACEPTIVE PILL

Hormonal treatment with the pill can be used alone, or in combination with surgery.

The pill can relieve endometriosis pain, especially if you are able to take the tablets continually for several months, such that a period does not occur. As with all medications side effects are possible, and vary between women.

PROGESTERONE TREATMENTS (minipill, Visanne, implanon, depo provera)

Whilst helpful for endometriosis, please discuss with Dr Anna Burrows. Some patients tolerate these treatments with good result. Others can experience side effects that include, but are not limited to, irregular bleeding, weight gain, tiredness, and depression in some women



ENDOMETRIOSIS TREATMENT OPTIONS

DANAZOL is a less commonly prescribed hormone treatment, as it does not provide contraception, and can cause side effects such as weight increase, acne, hair growth, and voice change.

GONADOTROPHIN RELEASING HORMONE AGONISTS (Synarel, Zoladex)

These medicines are used in severe cases to prevent further endometriosis and has the advantage of treating multiple, or smaller endometriosis lesions that surgery can miss.

They work by blocking oestrogen release from the ovaries, and thus side effects can occur. One side effect is a small loss in bone density, so the treatments can only initially last for 6 months, and then switch to other treatments.

The side effects can be also minimized by “add back therapy” which means taking a contraceptive pill at the same time. This does not appear to lessen the effectiveness of the treatment.

Such side effects are reversible, and can include hot flushes, changes in libido, hot flushes and sweats, vaginal dryness, muscle pains, mood changes and decreased breast size.



LAPAROSCOPY AND ENDOMETRIOSIS

LAPAROSCOPY IS A DIAGNOSTIC AND TREATMENT TOOL FOR ENDOMETRIOSIS

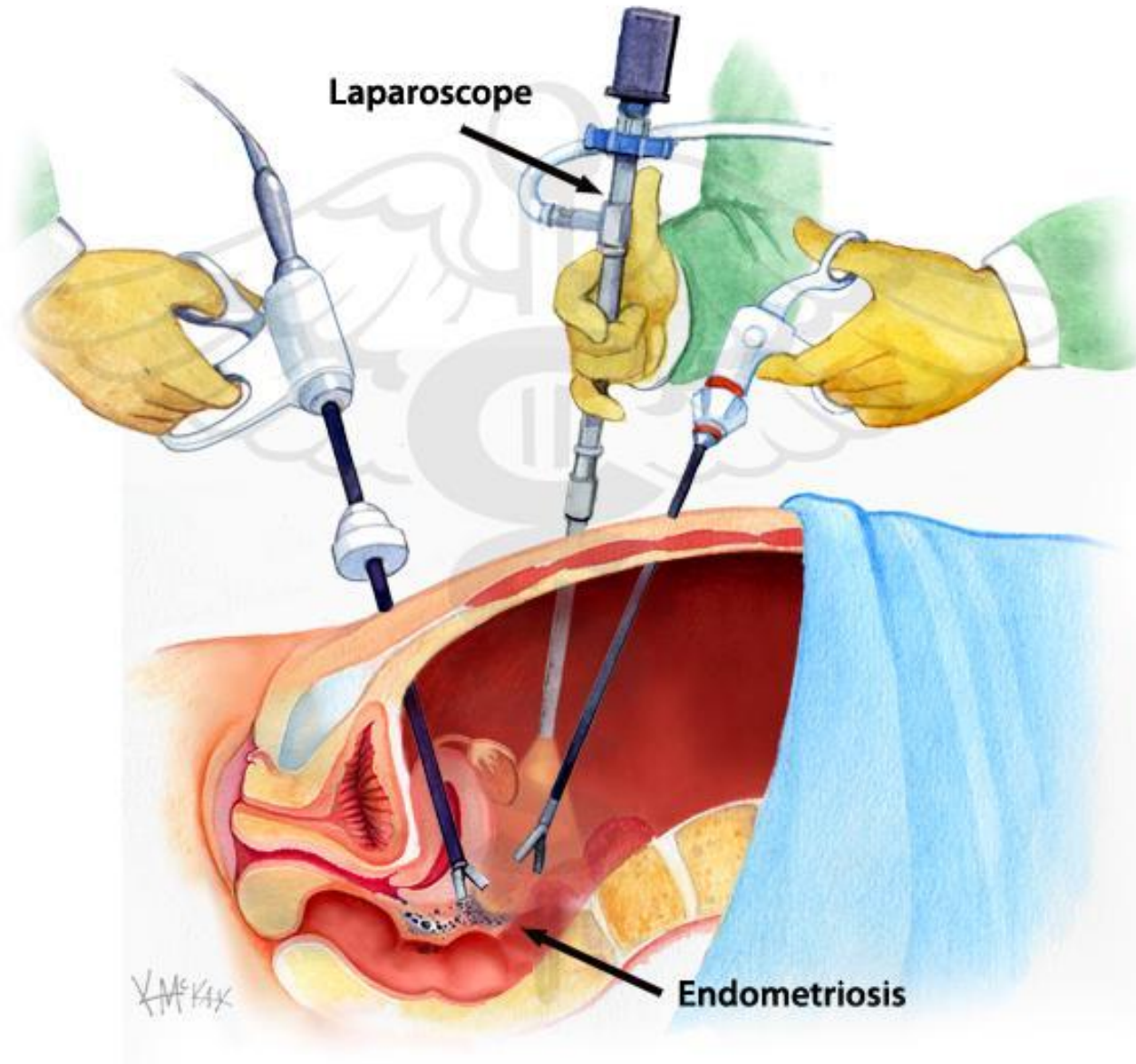
Surgery may delay and stop the progress of the disease.

Is used to remove or destroy patches of endometriosis as much as possible from the pelvic organs.

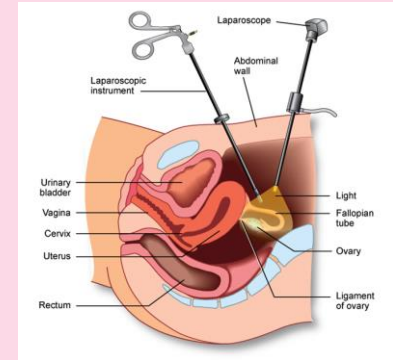
Surgery may be recommended to

- *treat pain and discomfort that has not been adequately controlled with medical therapy
- *improve fertility, that can be diminished by endometriosis
- *remove an endometrioma (chocolate cyst) from the ovary (or ovaries)
- *remove other areas of endometriosis and preserve fertility as much as possible
- *give a guide as to the extent of disease so that further medical treatment, (eg pills hormones) and follow up expectations can be discussed based upon the findings at surgery
- *if serious or significant endometriosis is diagnosed, it is a helpful tool to plan further extensive endometriosis surgery that may require other specialists such as colorectal surgeons or urologists

Keyhole surgery to remove endometriosis



OPERATIVE LAPAROSCOPY FOR ENDOMETRIOSIS.



You will be admitted as a day patient, but will need to arrange time off work, and someone to take you home and stay with you. The anaesthetic requires that you are fasting, and details will be provided along with a full consent form. Be sure to ask any questions, before, during, and after the consultation.

Under the anaesthetic the laparoscope, which is a thin telescope attached to a camera is inserted in an incision near the navel. The abdomen is gently inflated with carbon dioxide gas to raise the abdominal wall clear of the pelvic organs to improve the surgical view and access.

The pelvic organs can be gently moved using an instrument placed inside the uterus (via the vagina) and another instrument is placed through a second incision low in the abdomen. Other small incisions may be needed so the endometriosis can be removed as much as possible, via excision (remove endometriosis with small cutting instruments) or cautery (cutting and burning off disease using an electrical probe). Patches, nodules and endometriomas can be removed, and adhesions can be cut. If endometriosis invades deeply (Deeply Infiltrating Endometriosis) further treatment, hormonal or surgical may be needed as these can be difficult to access.

The telescope is removed, the gas is removed, and small stitches close the incisions.

RESULTS of LAPAROSCOPIC TREATMENT for ENDOMETRIOSIS

IMPROVEMENT IN PAIN

8 out of 10 women with pelvic pain report a reduction in pain. The best results is in patients with moderate to severe endometriosis. Even if the removal is successful, about 1 to 2 in 10 women do report a return of pain in the year after surgery. This is why adjunctive treatment such as the pill, a mirena, progesterone, or gnrh analogs are offered/discussed.

IMPROVEMENT IN FERTILITY

Improvement in fertility has only been proven in minimal and mild endometriosis. Most doctors agree that it would seem that treatment of moderate or severe disease surgically is of benefit. Alternatives such as IVF is also an option.

RECOVERY

After the anaesthetic, driving is prohibited for at least 24 – 48 hours. Most people would avoid driving and work for up to a week after surgery. Shower and bathe as normally, and pads or tampons are to be changed regularly.

Post operative symptoms include

- *pain and discomfort in the abdomen and at the incision sites, with some swelling
- *muscle aches pains and tiredness (that can also be due to pain killers)
- *light bleeding vaginally
- *shoulder tip pain due to the gas irritating the diaphragm
- *constipation is common – eat a light diet, plenty of fruit and oral fluid, and gentle exercise helps



POSSIBLE COMPLICATIONS of LAPAROSCOPY

GENERAL RISKS OF SURGERY

Cardiovascular issues such as blood clots strokes and heart attack, often related to the patient's own medical history. Preventive measures including compression stockings and SCCD (calf compression device) is used to prevent venous clots. Infection of a skin incision, the uterus, bladder, chest or bloodstream may require antibiotics. The risk is reduced by routine antibiotic inserted by the anaesthetist during your procedure (antibiotic prophylaxis).

Excessive bleeding requiring transfusion (this is rare)

A keloid or hypertrophic scar – this is a scar that becomes inflamed raised and itchy – it is annoying but not a threat to health.

SPECIFIC RISKS of LAPAROSCOPY

There is a small risk of making an unintended hole in a pelvic organ. This includes the bladder, ureter, bowel or large blood vessels. The incidence is 1 – 5 /1000 procedures. The risk is increased by technical difficulties such as previous surgery, scarring, a large mass, and patient factors (extreme low or extreme high body mass index). The usual outcome would be immediate repair as soon as the injury is diagnosed. It could be at the time of surgery, or recognized several days up to a week later. Surgical repair is rare, but could be extensive, including open surgery (laparotomy) or even a temporary colostomy bag. Uncommonly, a hernia (1/5000 – 1/10 000 cases) can occur from one of the small incisions.

Whilst the risk of complication is extremely low, one must factor the possibility into any decision making process.

POST OPERATIVE CARE LAPAROSCOPY

REPORT TO THE DOCTOR OR GO TO THE EMERGENCY IF YOU EXPERIENCE

Worsening nausea and vomiting

Persisting and increasing pain not responding to rest and pain killers

Heavy or smelly discharge from the vagina

Persistent redness, pain, pus, or swelling around the incisions or a temperature more the 38 degrees

Pain or burning on passing urine

A sudden collapse or shortness of breath

POST OPERATIVE

Whilst the risks need to be outlined, most people respond to usual rest and can resume normal activities and work quickly after keyhole (laparoscopy)

A post operative visit is essential so you can have a look at the images taken during your surgery, so that together you and Dr Burrows can discuss the outcome, findings, and most importantly the best way forward to manage you individual circumstances.

