Endometriosis is a condition which occurs when tissue that is normally found inside the womb, known as the endometrium or womb lining, grows in other parts of the body. The tissue may attach outside the womb, to the ovaries, fallopian tubes, the bowel or the bladder.

What is Endometriosis?

Endometriosis is a condition which occurs when tissue that is normally found inside the womb, known as the endometrium or womb lining, grows in other parts of the body. The tissue may attach outside the womb, to the ovaries, fallopian tubes, the bowel or the bladder. In very rare cases, endometriosis has been associated with other organs that are not in the pelvic area such as the lungs, the belly button or the liver. Figure 1 below is a diagrammatic presentation of the condition and some of the areas that can be affected.

The prevalence of endometriosis in the general population has not been accurately established. It is estimated that 5-10% of women of child bearing ages (usually 15 to 49 years) are affected by endometriosis.

During the menstrual cycle, the womb lining tissue that is displaced outside the womb also breaks down and bleeds in the same way the tissue in the womb does. The womb lining tissue located in the womb bleeds and leaves the body as menstrual flow, however, the abnormal tissue deposited outside the womb cannot exit the body. It therefore becomes trapped wherever it is located and causes irritation of surrounding tissues and scar tissue formation occurs on the organs to which it is attached, resulting in the pain that is experienced by women with the endometriosis.

Stages of endometriosis

There is consensus on the stages of endometriosis as classified by the American Society for Reproductive Medicine (ASRM). Endometriosis is classified into four stages, namely minimal (stage I), mild (stage II), moderate (stage III) and severe (stage IV). The stage is point based and depends on the severity, size, location and depth of the growths. It is important to emphasise that the stage of endometriosis does not correspond to the severity of any of the symptoms. For example a woman with mild endometriosis might experience more pain compared to a woman with moderate endometriosis. Figure 2 on the next page illustrates the different stages of endometriosis.

Causes and risk factors for endometriosis

Several theories on the causes of endometriosis have been put forward, however, the actual cause of endometriosis is unknown. It has been recognised that endometriosis usually affects women who are in their reproductive years and the following risk factors have been cited:

- A history of endometriosis in the family,
- First menstrual period at an early age,
- Heavy menstrual periods,
- Periods that are longer than 7 days,
- Menstrual cycles shorter than 28 days
There are several misconceptions around endometriosis and these include the fact that:

- **Severe period pain is normal**: Women endure varying levels of period pain and it is considered to be normal. However, if the pain is severe and interferes with day to day activities, the cause of the pain should be investigated.

- **Endometriosis is rare in young women**: Studies have been conducted and shown that a significant proportion of the women who seek medical attention for endometriosis are below the age of 30. Endometriosis can start as early as a girl’s first period.

- **Hormonal treatments cure endometriosis**: Hormonal treatments (e.g. contraceptive pill) do not cure endometriosis. They suppress the symptoms of endometriosis and there is a chance that once treatment is stopped the symptoms will recur.

- **Pregnancy cures endometriosis**: Just like hormonal treatments, pregnancy suppresses the symptoms. The symptoms might also be suppressed during breastfeeding in a case where breastfeeding is suppressing the menstrual cycle. Pregnancy does not cure endometriosis.

- **Hysterectomy cures endometriosis**: If the endometriosis was confined to the uterus (womb), then the symptoms will reduce after a hysterectomy. However, if the abnormal tissue was growing on other parts of the body, the symptoms will persist.

- **A confirmed diagnosis of endometriosis implies that one becomes infertile**: Although difficulty in falling pregnant is one of the complications of endometriosis, the diagnosis does not necessarily mean that one becomes infertile. The chances of conceiving naturally decreases with the severity of the disease and with age, just like in women without endometriosis.

### Signs and symptoms

While some women with endometriosis might experience painful symptoms to varying extents and/or infertility, others have no symptoms at all. The symptoms of endometriosis depend on the affected organ and can range from mild to moderate, or severe. Some of the symptoms are listed below:

- **Period pain with or without excessive bleeding**: The pain is different to the normal period pain. The pain usually starts a few days before the period and it can continue throughout the period. The pain can also be experienced on the lower back. It is important to note that excessive bleeding with endometriosis can occur during the period or at any time during the menstrual cycle.
• **Painful sexual intercourse:** The pain is typically felt deep inside during intercourse and may last a few hours after intercourse.

• **Difficulty becoming pregnant:** Endometriosis has been diagnosed in a significant proportion of women seeking fertility treatment. Although the reason for reduced fertility is not always very clear, one of the reasons is attributed to the clumps of the abnormal tissue blocking the passage of the egg from an ovary to the fallopian tube.

• **Other symptoms:** Pain with bowel movements, pain in the lower abdomen when passing urine, and, rarely, blood in the urine or faeces. If patches of abnormal tissue occur in other sites of the body, pains in those parts of the body can be experienced at the same time as period pains.

**Diagnosis**

Endometriosis can be diagnosed by obtaining detailed history from the patient and confirming the diagnosis by performing:

• Pelvic physical examination

• Pelvic scans - the doctor can perform either an abdominal or a vaginal ultrasound

• Laparoscopy - this is a procedure whereby a small cut is made through the belly and a small thin tube with a camera is passed through to view the organs affected by endometriosis.

**Treatment options**

The decision to treat, and the treatment options vary depending on the severity of the condition, the severity of symptoms, the patient's age, priorities of achieving pain relief or fertility, as well as the determination of whether or not the patient wants to have children. When presenting with mild symptoms, affected women might benefit from lifestyle modification or no treatment at all. However, there will be continuous monitoring as endometriosis is a disease that can progresses over time. Treatment options available are discussed below:

**Pain medication**

Pain killers do not treat the underlying condition but they are commonly used to relieve the pain and cramping associated with endometriosis.

**Hormonal treatment**

With hormonal treatment it is important to bear in mind that women respond differently to the different options available. Therefore if the side effects are unbearable, the treatment must be reviewed.

• Combined oral contraceptive pills - the pill has been found to manage levels of oestrogen and progesterone which make menstrual periods shorter and lighter consequently easing the pain of endometriosis. However, symptoms may return once the pill is stopped.

• Progesterone therapy - this includes oral medication, injectables, implants and intra-uterine devices.

• Other hormones used in managing endometriosis include the use of testosterone derivatives and a different class of hormones known as gonadotrophin-releasing hormone (GnRH).

**Surgical intervention**

• Laparoscopy: During laparoscopy, the doctor may remove visible endometrial growths or adhesions, and this usually gives an immediate pain relief. However, the symptoms might return. The likelihood of symptoms returning increases with time.

• Open Surgery: Severe cases of endometriosis may require open abdominal surgery to remove the abnormal tissue deposits.

• Hysterectomy: Removal of the uterus and possibly all or part of the ovaries and fallopian tubes is usually the last resort in the management of endometriosis. Although this treatment has a high success rate, endometriosis might still recur. Hysterectomy and the removal of the ovaries and/or fallopian tubes area are all irreversible procedures.

**What is covered as PMB level of care?**

Endometriosis is a prescribed minimum benefit (PMB) condition under Diagnostic Treatment Pair (DTP) code 434M (Non-inflammatory disorders and benign neoplasms of ovary, fallopian tubes and uterus). Endometriosis in other areas is not included in the current PMB regulations. This implies that the medical scheme should fund the costs associated with the diagnosis and treatment of endometriosis. The diagnostic procedures described above are PMB level of care. The DTP covers the cost of medical and surgical management of endometriosis, which should be PMB with explicit mention of the following surgical procedures:

• salpingectomy (surgical removal of the fallopian tube),

• oophorectomy (surgical removal of one or both ovaries) and

• hysterectomy (surgical removal of all or part of the womb).

Laparoscopy can be used to diagnose, to identify the stage of endometriosis, and to remove the abnormally deposited tissue. Laparoscopy should be funded as PMB level of care. Some medical schemes have DSP arrangements and protocols in place which should be verified and discussed with the medical scheme prior to either diagnostic or treat-
Surgical interventions are usually reserved for women who are not responding to the pain medication and hormonal options discussed above. All medicine options should be paid from PMB benefits by the medical schemes depending on the scheme rules and protocols.

**References**

- Figure 1: https://www.endometriosis-uk.org/understanding-endometriosis [Date accessed: 7 September 2016]
- Figure 2: http://www.endo-resolved.com/endometriosis_stages.html [Date accessed: 12 September 2016]