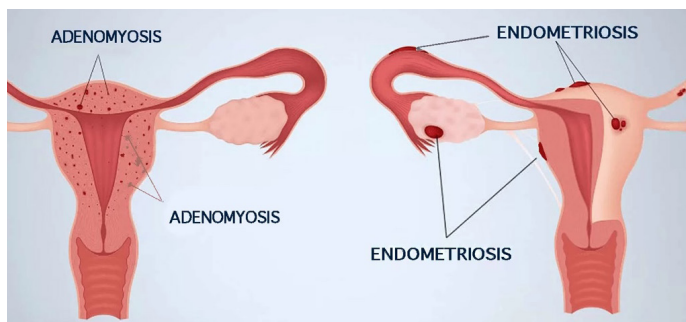


Endometriosis and Adenomyosis

Dr Amani Harris



Short Bio:

Dr Amani Harris is obstetrician and gynaecologist with interests in advanced laparoscopic and robotic gynaecological surgery. Her clinical focus includes severe endometriosis, complex hysterectomy, hysteroscopic surgery, adenomyosis, pelvic pain, removal of uterine fibroids, myomectomy and ovarian cysts.

Definition of endometriosis and adenomyosis

Endometriosis is a benign gynaecological condition characterised by the presence of cells similar to the endometrium (lining of the uterus) growing outside the uterine cavity. It is an estrogen-dependent chronic inflammatory disease affecting women in their reproductive years. It can cause pain and/or infertility. However, some patients remain asymptomatic.

Endometriosis affects approximately 10% of females in the reproductive age group.

Adenomyosis like endometriosis is characterised by the deposition of endometrial like cells in the muscle of the uterus (myometrium). These cells also follow the hormonal cycle and undergo bleeding and shedding within the muscle layers at time of menstruation. Adenomyosis often occurs in patients with endometriosis, however, can also be found in many without endometriosis. The two conditions are different.

Symptoms:

Both endometriosis and adenomyosis can cause pain and be associated with infertility. Symptoms often overlap between the two conditions. Anecdotally, I find most women describe adenomyosis pain as crampy, with a heaviness and dragging sensation in the pelvis that can radiate down legs or lower back.

Symptoms	Endometriosis	Adenomyosis	Both
Asymptomatic			•
Period pain			•
Pain with sex			•
Persistent pain			•
Heavy menstrual bleeding		•	
Dyschezia	•		
Dysuria/Haematuria	•		
Infertility			•
Inflammatory symptoms: lethargy, bloating, mood changes, brain fog			•

Endometriosis as three different clinical entities:

According to their physiopathology and their localisation, endometrial lesions can be divided into three different types: *superficial peritoneal endometriosis, ovarian endometrioma and deep infiltrating endometriosis (DIE)*.

1. Superficial Peritoneal:

- Found in 15-50% all women with endometriosis.
- Requires laparoscopy to diagnose.

2. Ovarian endometrioma:

- Defined as ovarian cysts covered by an endometrial epithelium containing thick, brown fluid (old blood) also known as “chocolate cyst”.
- Usually detected by most transvaginal ultrasounds.
- Can grow in size.
- Large endometriomas are often symptomatic requiring surgical excision.
- Endometriomas and their excision may have a negative impact on oocytes / egg reserve / AMH levels.

3. Deep infiltrating endometriosis (DIE)

- Endometriotic lesions >5mm peritoneal depth of invasion.
- DIE may affect several pelvic organs such as uterosacral ligaments, vagina, rectovaginal septum, pelvic side walls, ureter, bladder, or bowel.
- DIE can also affect organs outside pelvic cavity such as appendix, diaphragm, heart and lungs.
- Can be diagnosed via DIE scan.
- DIE scans are a crucial part of the pre-operative planning in patients with bowel symptoms to liaise with other specialists such as colorectal surgeons within our team to complete the procedure together.
- Surgery for DIE can involve the need for shaving of bowel nodules, discectomy or bowel resection via laparoscopy or robotic excision.

Diagnosis:

Diagnosis remains challenging and we continue to observe a delay of typically six to seven years. However, treatment often begins without confirmation of the condition and in many cases is successful. Transvaginal ultrasound plays a crucial role in diagnosing ovarian endometrioma. A specialist transvaginal ultrasound called a deep infiltrating endometriosis (DIE) scan carried out by a gynaecologist with expertise in endometriosis scanning is accurate at diagnosis ovarian and deep infiltrating endometriosis. Magnetic resonance imaging (MRI) is also excellent, although in Australia, ultrasound is better utilised.

Staging or classification of endometriosis:

The most commonly used system was developed by the American Society for Reproductive Medicine (ASRM). The ASRM classification system is divided into four stages according to the number of lesions and depth of infiltration: minimal (Stage I), mild (Stage II), moderate (Stage III) and severe (Stage IV). The classification also uses a point system to quantify endometriotic lesions. This point system allows for a numerical scale the disease.

A score of 15 or less indicates minimal or mild disease. A score of 16 or higher may indicate moderate or severe disease. The severity or the score of the disease does not correlate to the amount of pain or presence of other symptoms.

ASRM Endometriosis Classification System

STAGE I (MINIMAL)		STAGE II (MILD)		STAGE III (MODERATE)	
PERITONEUM	Superficial Endo - 1-3 cm -2	PERITONEUM	Deep Endo - > 3 cm -6	PERITONEUM	Deep Endo - > 3 cm -6
R. OVARY	Superficial Endo - < 1 cm -1	R. OVARY	Superficial Endo - < 1 cm -1	CULDESAC	Partial Obliteration -4
	Filmy Adhesions - < 1/3 -1		Filmy Adhesions - < 1/3 -1	L. OVARY	Deep Endo - 1-3 cm -16
	TOTAL POINTS		TOTAL POINTS		TOTAL POINTS
	4		9		26
STAGE III (MODERATE)		STAGE IV (SEVERE)		STAGE IV (SEVERE)	
PERITONEUM	Superficial Endo - > 3 cm -4	PERITONEUM	Superficial Endo - > 3 cm -4	PERITONEUM	Deep Endo - > 3 cm -6
R. TUBE	Filmy Adhesions - < 1/3 -1	L. OVARY	Deep Endo - 1-3 cm -32**	CULDESAC	Complete Obliteration -40
R. OVARY	Filmy Adhesions - < 1/3 -1		Dense Adhesions - < 1/3 -8**	R. OVARY	Deep Endo - 1-3 cm -16
L. Tube	Dense Adhesions - < 1/3 -16*	L. Tube	Dense Adhesions - < 1/3 -8**		Dense Adhesions - < 1/3 -4
L. OVARY	Deep Endo - < 1 cm -4		TOTAL POINTS	L. Tube	Dense Adhesions - > 2/3 -16
	Dense Adhesions - < 1/3 -4		52	L. OVARY	Deep Endo - 1-3 cm -16
	TOTAL POINTS		30		Dense Adhesions - > 2/3 -16
					TOTAL POINTS
					114

*Point assignment changed to 16
**Point assignment doubled

Treatment:

It is important for women to have a referral to a non GP-specialist with specific training in endometriosis including advanced laparoscopic / robotic surgery who works in a multi-disciplinary setting involving allied health specialists including: pelvic floor physiotherapists, dieticians and acupuncturists to ensure the best outcome for their patients. Treatment may include pain-relief medicines, hormone therapy, non-hormone treatments, surgery and combined treatments.

Hormonal treatments:

- **COCP:**
 - Taken continuously can be more effective.
- **Progestogens:**
 - Norethisterone (Primolut).
 - Medroxyprogesterone acetate (Depot-Provera).
 - Mini-pill (Microlut).
 - Drospirenone (Slinda).
 - Dienogest (Visanne): Effect on endometrial tissue, not contraceptive, anti-estrogen properties.
- **Long acting:**
 - Depot / Implanon / Mirena.
 - GnRH agonist: Zoladex, use for up to 2 years with add-back therapy.
 - GnRH antagonist plus add-back (Ryeqo): Relugolix / estradiol / norethisterone (Relugolix).

Surgery:

- Surgery is very effective at alleviating pain in up to 85% of women.
- A minimally invasive approach should always be utilised either via laparoscopy or robot to provide patients with benefits including less post-operative pain, earlier return to ADL, less adhesion and risk of incisional hernia.
- It is indicated in patients with pain not responding to other treatment, those who do not wish for a conservative approach, those who experience pain while trying to conceive, those who are not conceiving or those who have failed IVF cycles as it can improve success.
- Surgery for deep infiltrative endometriosis requires a special skill set and a multidisciplinary approach with colorectal surgeons and / or urologists.
- Surgery is not a cure for endometriosis as there is a risk of recurrence and it does not manage pain related to adenomyosis without a hysterectomy.
- Hysterectomy remains the definitive treatment for adenomyosis if medical therapy fails.

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Dr Amani Harris

BMEDSC (UNSW), MBBS(HONS)(USYD),
MADVGYNAESURG (UWS), MRMED (UNSW),
FRANZCOG

Location:
331 Port Hacking Road
Miranda, NSW, 2228

P: 02 9526 7477
F: 02 9526 7455

Dr Amani Harris is an obstetrician and gynaecologist with an interest in complex laparoscopic and robotic gynaecological surgery. She is dedicated to improving women's healthcare and a strong advocate for empowering women's choices through actively listening to her patients, providing holistic evidence-based advice and supporting them in their management plan.

