

# Endometriosis & Adenomyosis

---

Dr. Thilina S Palihawadana



# Learning objectives

---

- What is Endometriosis and Adenomyosis?
- What is the pathophysiology?
- What is the clinical presentation?
- What are the consequences?
- What investigations are useful?
- How do you treat these conditions?

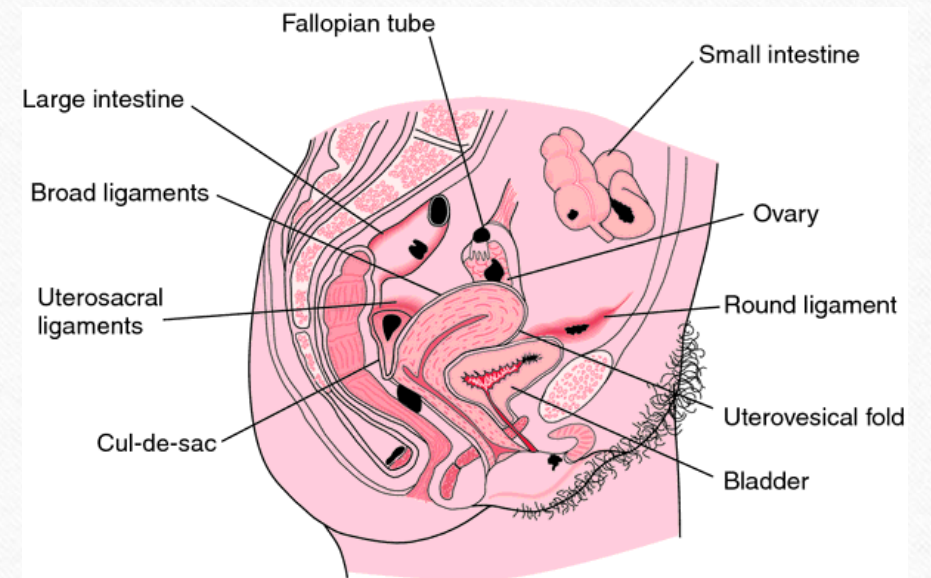
# Endometriosis

---



# What is endometriosis

- The presence of endometrial tissue (glands and stroma) outside the endometrial cavity
- The possible sites
  - Pelvic organs and peritoneum
  - Rare - Lungs, Brain



# What is endometriosis

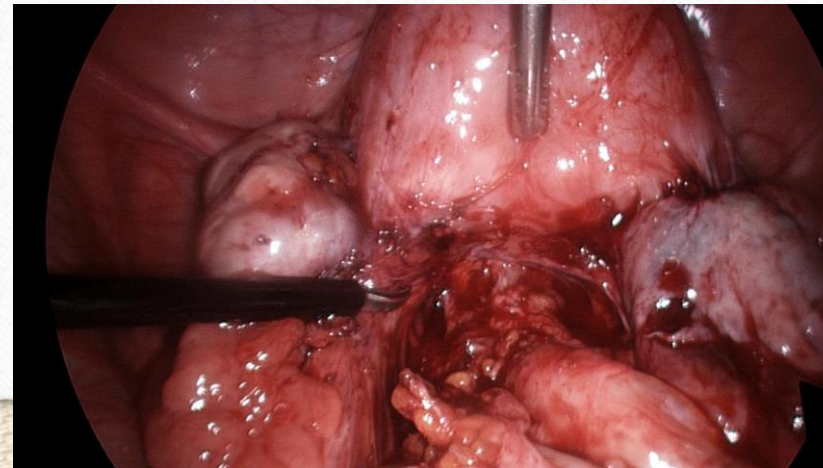
---

- Undergo cyclical changes under the influence of hormones
  - Cause permanent changes – Fibrosis and adhesions
- Severity can vary

**Few small  
surface lesions**



**Deep infiltrating solid  
masses +/-  
Endometriomas**





# What is endometriosis

---

- Undergo cyclical changes under the influence of hormones
  - Cause permanent changes – Fibrosis and adhesions
- Severity can vary
- Symptoms show a wide spectrum
  - Incidental finding at laparoscopy
  - Severe debilitating symptoms
    - Sometimes not related to disease severity

# Aetiology

---

- Two main theories try to describe it
  - Metastatic theories – endometriotic cells getting transported
    - Retrograde menstruation
    - Laparoscopy scars
    - Haematogenic / lymphatic spread
  - Metaplasia theories – other cells undergoing change
    - First to primitive cell types (coelomic metaplasia)
    - Distance sites – Lung, Brain



# Disease burden & presentation

---

- Estimated to be in 8-10% in the reproductive age
  - Much higher among women who are symptomatic
- Clinical presentation
  - Dysmenorrhea
  - Chronic pelvic pain
  - Infertility



# Diagnosis of endometriosis

---

- Symptoms

- Dysmenorrhea – often outlasting the menses
- Heavy menstrual bleeding
- Dyspareunia

- Signs

- Pelvic tenderness
- Fixed uterus
- Adnexal tenderness
- Adnexal masses (endometriomas)
- Deep infiltrating lesion in POD

# Diagnosis of endometriosis



## Signs

- Pelvic tenderness
- Fixed uterus
- Adnexal tenderness
- Adnexal masses (endometriomas)
- Deep infiltrating lesion in POD



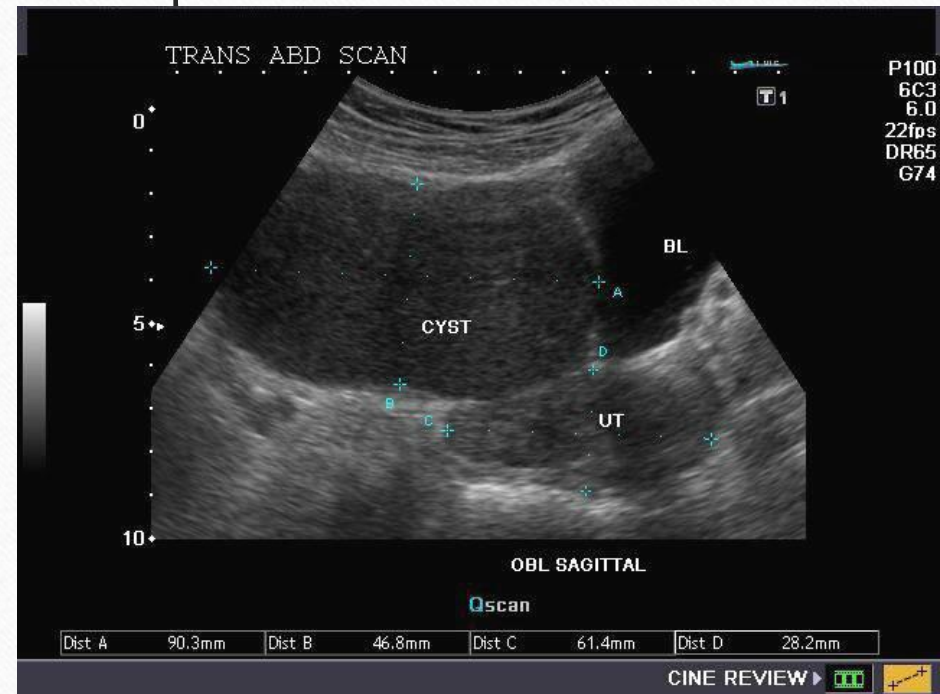
# Diagnosis of endometriosis

---

- Investigations
  - USS – Only if endometriomas are present

# Diagnosis of endometriosis

- Investigations
  - USS – Only if endometriomas are present





# Diagnosis of endometriosis

---

- Investigations
  - USS – Only if endometriomas are present
  - MRI has good sensitivity and specificity for endometrioma
    - If in doubt
  - CA 125 – No value due to non-specific nature
    - Often elevated in deep infiltrating lesions / endometriomas
    - Less reliable in mild-moderate disease

# Diagnosis of endometriosis

---

- Laparoscopy
  - Is the gold standard
  - Systematic inspection of the entire pelvis
  - Samples for histology is a good practice
  - Treatment can be undertaken at the same time if needed



# Diagnosis of endometriosis

---

- Laparoscopy

# Diagnosis of endometriosis

---

- Laparoscopy



# Management of endometriosis

---

- Key questions
  - What do I need to treat?
    - Disease, Symptoms, Both ?
  - What do I want to do?
    - Improve QoL?
    - Improve fertility?
    - Improve disease progression?

# Management of endometriosis

---

- What are the treatment options available
  - NSAIDs – Commonly Mefenamic acid and Naproxen
  - Hormonal treatment
    - COCP
    - Progestogens – Depot, IUS
    - Danazol
    - GnRH-a



# Management of endometriosis

---

- What are the treatment options available
  - Surgery

# Management of endometriosis

---

- What are the treatment options available
  - Surgery
    - Excision of lesions



# Management of endo

---

- What are the treatment options
  - Surgery
    - Excision of lesions
    - Ablation of lesions



# Management of endometriosis

---

- What are the treatment options available
  - Surgery
    - Excision of lesions
    - Ablation of lesions
    - Removal of endometriomas



# Management of endometriosis

---

- What are the treatment options available
  - Surgery
    - Excision of lesions
    - Ablation of lesions
    - Removal of endometriomas
    - Adhesiolysis

# Management of endometriosis

---

- What are the treatment options available
  - Surgery
    - Excision of lesions
    - Ablation of lesions
    - Removal of endometriomas
    - Adhesiolysis
    - Oophorectomy (often with hysterectomy)



# Treatment – Improve associated pain

---

- NSAIDs
  - Usually improve symptoms
  - Often inadequate
- Hormonal methods
  - Good for dysmenorrhea but limited effectiveness in CPP.
- Surgery
  - Very effective for superficial lesions
  - Variable efficacy for deep infiltrating lesions

# Treatment – Improve fertility

---

- NSAIDs
  - Limited value
- Hormonal methods
  - No place in infertility
  - Pre-treatment with GnRHa before ARTs – being studied
- Surgery
  - Mild – moderate disease – ablation improve fertility
  - Severe disease – Require IVF
  - Endometriomas >4cm needs removal prior to IVF



# Treatment – To prevent disease progression

---

- The effectiveness of various treatments is not clear
- Hormonal treatment can be used
- Very little place for surgical treatment
  - Should be done for an indication
- If it improves the long term complications is not clear

# Treatment – Chronic pelvic pain

---

- Often difficult to manage
- May need long term treatment
- No treatment with proven efficacy
- Need to rule out other causes
- Aim should be to improve QoL
  - The common pathways of managing chronic pain may be helpful



# Adenomyosis

---

# What is adenomyosis

---

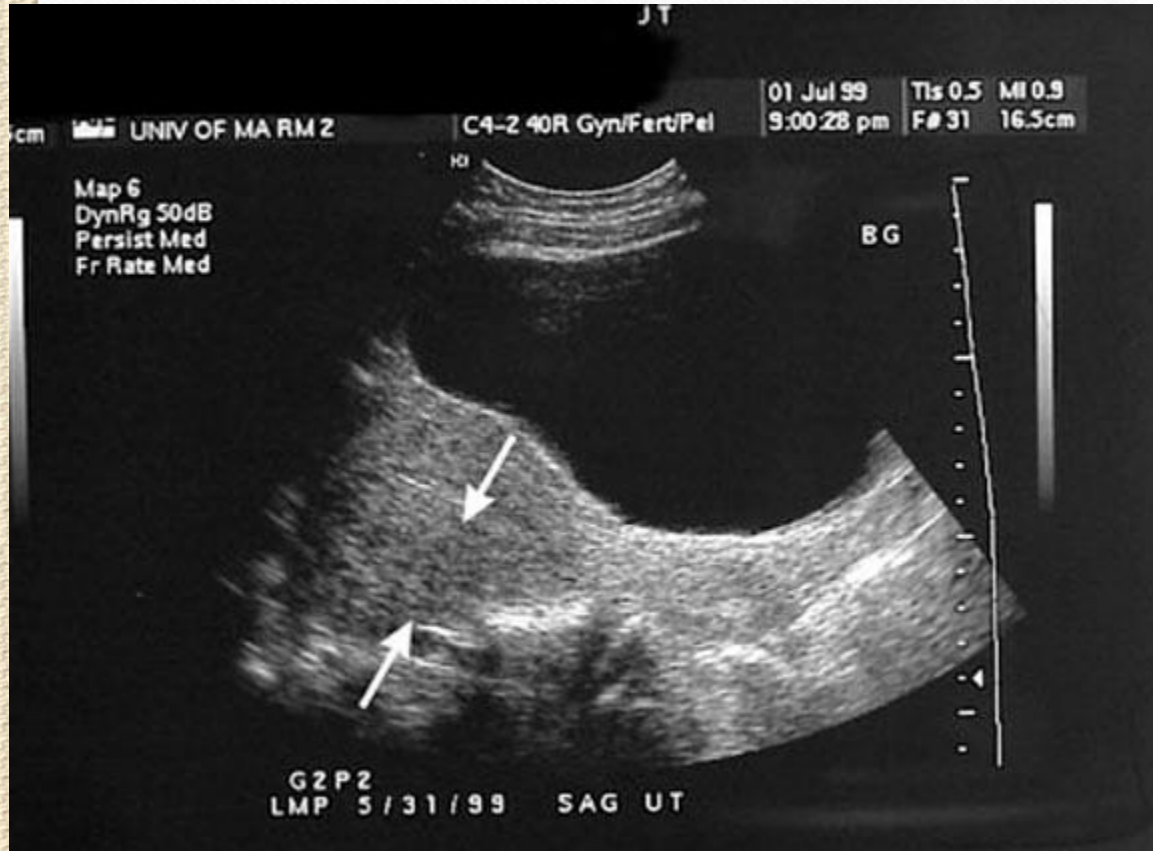
- A condition characterised by benign invasion of the endometrium in to the myometrium.
  - Often cause diffuse hyperplasia of the myometrium
- Unlike in endometriosis, the ectopic endometrial tissue is not responsive to ovarian hormone changes
- Endometriosis can co-exist



# Clinical presentation

---

- Often older multiparous women
- History - Severe menorrhagia, dysmenorrhea and abdominal pain.
- O/E- enlarged uterus
  - Often regular enlargement & tenderness (cf. Fibroid uterus)
- USS – Diffusely thickened myometrium
- Diagnosis can be confirmed only after hysterectomy
  - Demonstration of endometrial tissue (glands and stroma) within myometrium





# Effects of adenomyosis

---

- Affect QoL
  - Pain during menstruation
  - Heavy periods – Anaemia
  - Dyspareunia
  - Abdominal / pelvic pain
  - Fertility – not enough strong evidence

# Treatment of adenomyosis

---

- Spontaneous resolution after menopause
- Symptomatic relief is the key
- NSAIDs is the only treatment with proven efficacy
- Hormonal treatment (COCP, LNG-IUS) may reduce symptoms
- Hysterectomy is the only definitive treatment