Endometriosis: the basics

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Endometriosis

- Endometriosis is defined as the presence of endometrial-like tissue outside the uterus:
  - Ovaries and fallopian tubes
  - Peritoneum
  - The outer side of uterus and uterosacral ligaments

which induces a chronic, inflammatory reaction.

Symptoms

- Variable and unpredictable
  - asymptomatic
  - dysmenorrhoea 90%
  - chronic pelvic pain (CPP) 70%
  - deep dyspareunia 75%
  - sacral backache w/ menses
  - dysuria +/- haematuria (bladder involvement)
  - bowel involvement
  - infertility 55%

Pathogenesis

- Retrograde menstruation (Sampson)
- Genetic predisposition
- Haematogenous or lymphatic spread (Halban)
- Coelomic metaplasia (Meyer/Novack)
- Latrogenic dissemination

Endometriosis

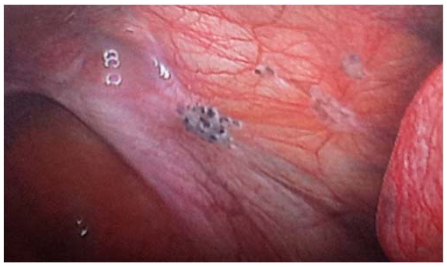
- 7-10% of general population
- 20-50% of infertile women
- 70-85% in women with chronic pelvic pain (CPP)
- No racial predisposition
- Familial association with almost 10x increased risk of endometriosis if affected 1st degree relative

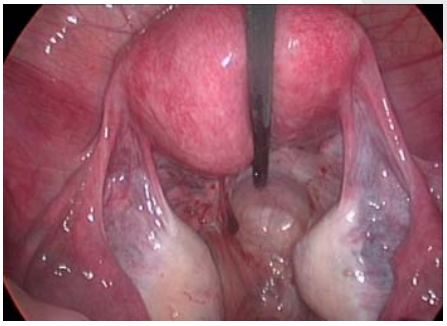
Endometriosis - a difficult diagnosis to make?

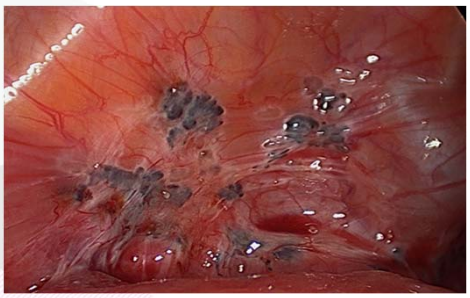
- Diagnosis can be delayed up to 7 years due to:
  - a belief that period pain is normal (often combined with the belief that it will resolve with pregnancy);
  - a belief that endometriosis is a disease of older women
  - symptoms can be confused with symptoms of irritable bowel syndrome (IBS), PID;
  - physical examination is often normal;

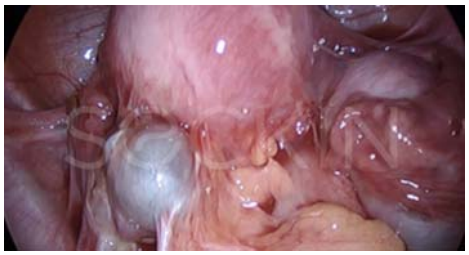
LAPAROSCOPY IS THE ONLY WAY TO MAKE A DEFINITIVE DIAGNOSIS

Appearance of endometriosis



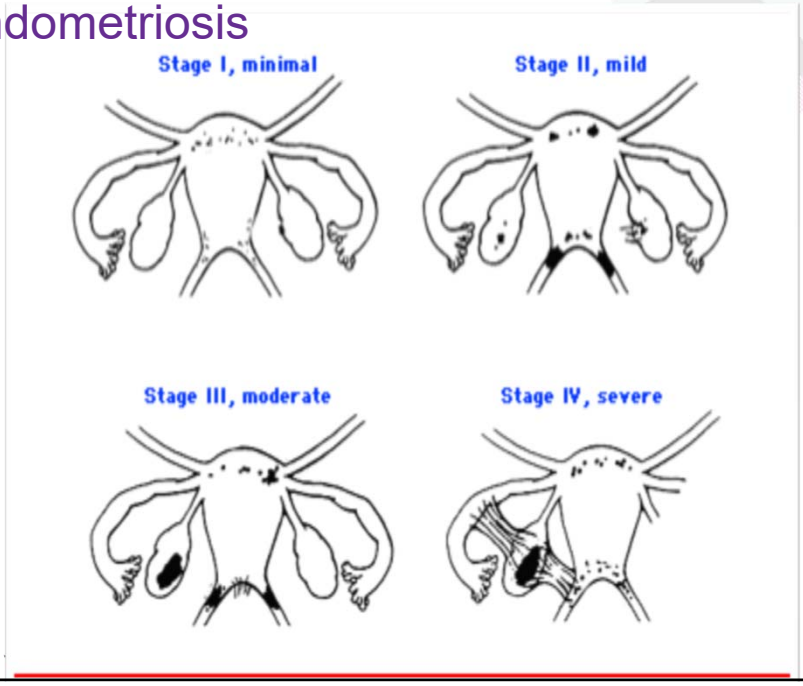






Classification of endometriosis

- Classification of endometriosis into levels and stages such as mild, moderate & severe
- Some women have little endo but severe pain and others have many lesions but have little to no pain



Diagnosing endometriosis

- **A pain diary is very useful**
  - documenting symptoms, activities and school attendance
- **Differential diagnoses**
  - symptoms arising from GI, GU, musculoskeletal systems
  - psychosocial factors
- **Physical examination**
  - abdominal exam is frequently normal;
  - pelvic exam is inappropriate if patient has never been sexually active
  - bimanual palpation can be useful

Investigations

Laboratory studies

- pregnancy test if appropriate
- FBC, ESR – ?acute/chronic inflammatory process
- Urinalysis and urine culture can help identify a urinary tract cause of pain.
- sexually active teenager – Chlamydia screen
- CA 125 is not helpful due to the high rate of false positives.

Ultrasound

- **a negative ultrasound does not exclude the diagnosis of endometriosis**
- rule out a reproductive tract anomaly, ovarian cyst/torsion and appendicitis
- good at detecting endometriomas

Key questions to ask - and answers suggestive of possible endometriosis

- Age at menarche - association between endometriosis and menarche <14yo.
- Age when pain developed - Primary dysmenorrhoea often starts soon after periods become regular. Pain that begins months-years after menarche is more suspicious for a pathological cause such as endometriosis.
- Cyclicity - endometriosis-related pain often starts a few days before menses and often worse day 1-2 of menstruation (may last throughout entire period)
- Location - pain often described as low pelvic/back (may be central or more on one side), radiating to inner thighs, groins, rectum.

Key questions to ask - and answers suggestive of possible endometriosis

Severity

- adolescent dysmenorrhoea is common (>75%), majority described as mild. Endometriosis-related pain often described as severe, cramping, unbearable. Symptom severity is not related to extent of disease.

Non-menstrual pelvic pain

- present in >25% adolescents with endometriosis.

Other pelvic symptoms

- common (up to 34%), may be worse with menses
- bowel (alternating bowel habit, bloating, dyschezia (rectal pain with defecation));
- bladder (dysuria, frequency, urgency);
- dyspareunia (typically deep and central).

Key questions to ask - and answers suggestive of possible endometriosis

Treatments tried

- most women will have significant symptom improvement with NSAIDs and/or hormonal therapy within 3-6 months.
- In young women whose symptoms are not controlled with medical management, laparoscopy reveals high rates of endometriosis (up to 70%). The estimated rate of endometriosis in adult women is 5-17%.

Impact of pain on QoL

- 10% of teenage girls report severe pelvic pain with a high rate of interference with school & sport

Infertility?

Family history of endometriosis

- In a first-degree relative

Empirical treatment

Prostaglandin synthetase inhibitors (Ponstan)

NSAIDs (Ibuprofen)

- Useful for dysmenorrhoea by decreasing circulating prostaglandins and hence pain.
- NSAIDs taken on a regular basis, in adequate doses, commenced a day or 2 before the expected onset of menstruation.

Combined oral contraceptive pill (COCPs)

- Work in 2 ways:
  - the dominant progestin effect leads to atrophy of both ectopic and eutopic endometrial tissue
  - by inhibiting ovulation COCs lead to a decreased prostaglandin synthesis

Surgical management

- Laparoscopy - gold standard for diagnosis
- Lesions can be subtle, minimal/mild.
- Surgery has been shown to reduce pain.
- The laparoscopist should be experienced in identifying lesions, and be able to treat them.
- After laparoscopic treatment of endometriosis follow-up with medical therapy has been shown to:
  - improve quality of life with pain reduction,
  - prolong time between operations and
  - potentially preserve fertility.

Post-operative medical management

Examples

- NSAIDs, simple analgesia as required.
- Combined oral contraceptive pills (COCPs)
- Progestins
  - include oral progesterone, Implanon, Depo-provera; Mirena IUD
  - all cause atrophy of endometrial tissue
  - common side effects: breakthrough bleeding, acne, weight gain, headaches and mood fluctuations.
  - Depo-provera is associated with a decrease in bone mineral density after 2 years of continuous use

Endometriosis: impact on mental health

- Higher rates of depression, anxiety and emotional distress in women with endometriosis than women in the general population
- "Distress"; "hopelessness"; "isolation"; "frustration"; "worthlessness"; "grief"; "loss" – common descriptors

Screening
Key message: Assess mental health

During the last month, have you:

- often been bothered by feeling down, depressed or hopeless?
- often been bothered by having little interest or pleasure in doing things?
- been bothered by feeling excessively worried or concerned?

…yes to any, requires further exploration

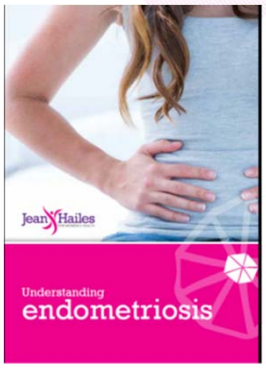
Multidisciplinary approach

- Education
  - HPs
  - self
- Medicines
  - GP
  - Gynaecologist
  - CPP clinic
- Surgery
  - Gynaecologist
  - Bowel surgeon/
  - Urologist
- Complementary therapy
  - Naturopath, herbalist
  - Acupuncturist, masseur
- Wellbeing and mood
  - Self, nutrition, exercise, meditation
  - GP
  - Counselling
  - psychologist

Conclusion

- Severe period pain should make you suspicious of endometriosis
- Early diagnosis and intervention can improve quality of life
- Management options depend on age and life stage of the woman
- Increased recognition of psychological burden
- A **multi-disciplinary approach is the optimum model of care to support timely diagnosis, treatment and management of symptoms.**

Resources



Endometriosis Action Plan 2018

- A five year plan is designed to increase awareness and understanding of endometriosis and improve the length of time to diagnosis and treatment options.

  Includes:
  - Research
  - Awareness raising
  - Resources
  - Social Media

Resources

jeanhailes.org.au
endometriosisaustralia.org
endoactive.org.au

Thank you

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