核心課程編號：F1

痛經及陰道出血

尹致翔醫師/蘇國銘醫師

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學習目標

一年期 PGY 核心課程	學習目標	UGY 相關核心課程	學習目標
月經週期異常、經痛及陰道出血	Medical Knowledge (MK) Patient Care (PC) Interpersonal and Communication Skills (CS) Professionalism (P) Practice-Based Learning and Improvement (PLI) Systems-Based Practice (SBP) **知識** 1. 月經異常與一般疾病的可能相關。(MK) 2. 女性於停經前經期改變之特徵。(MK) **技能** 1. 內診及窺陰器擺放技巧。(PC、CS) 2. 月經異常之鑑別診斷及基本處理原則。(P、PC) 3. 婦科超音波之基本判讀。(P、PLI) **態度與專業素養** 1. 學習有條理的分析異常月經之意義並緩解病患恐慌。(PC、PLI) 2. 提供最具成本效益之治療方式。(PLI、SBP)	正常月經機轉、月經異常、(經痛併到下腹痛)、不正常出血	Medical Knowledge (MK) Patient Care (PC) Interpersonal and Communication Skills (CS) Professionalism (P) Practice-Based Learning and Improvement (PLI) Systems-Based Practice (SBP) **知識** 1. 各種月經異常專業術語之定義。(MK) 2. 月經的機轉。(MK) 3. 各種造成月經異常疾病之基本知識。(MK) 4. 口服賀爾蒙藥物之副作用及效果。(MK) **技能** 1. 學習收集及詢問婦女的一般婦產科病史。(PC、CS) 2. 詳細精確的描述患者月經狀態。(PC、MK) 3. 婦產科超音波之使用時機。(PC、P) **態度與專業素養** 1. 於收集病史時避免使患者感到受侵犯及不適。(PC、CS) 2. 於問診及檢查時以同理心安撫患者。(PC) 3. 學習搜尋與月經異常相關之實證醫學知識。(P、PLI)

痛經

Dysmenorrhea

Dysmenorrhea

- **Primary dysmenorrhea**: menstrual pain without pelvic pathology. It usually appears within 1 to 2 years of menarche.

- **Secondary dysmenorrhea**: painful menses associated with underlying pathology. It develops after menarche and can occur with anovulatory cycles.

Primary Dysmenorrhea

- **Cause**: increased endometrial prostaglandin

- **Symptoms**:

The pain usually begins a few hours before or just after the onset of a menstrual period, and may last up to 48 to 72 hours.

It is similar to labor, with suprapubic cramping, colicky in nature, and is improved with abdominal massage, counterpressure, or movement of the body

Primary Dysmenorrhea

- **Signs**:
  Suprapubic region tenderness
  Uterine tenderness
  Severe pain with movement of the cervix
  Palpation of the adnexal structures is absent
- **Diagnosis**: history and presence of normal pelvic exam.
- **Treatment**:
  Prostaglandin synthase inhibitors
  Oral contraceptives are agent of choice.
  (More than 90 % relief)

Secondary Dysmenorrhea

• The pain often begins 1 to 2 weeks before menstrual flow and persists until a few days after the cessation of bleeding.

• Cause:

endometriosis

adenomyosis

IUD

• Treatment: NSAID, oral contraceptive pills not as effective

Acute pelvic pain

- Pregnancy-related
  - Abortion
  - Ectopic
- Disorders of the uterus and cervix
  - Cervicitis
  - Endometritis
  - Degenerating myoma
- Disorders of the adnexa
  - Salpingitis
  - Tuboovarian abscess
  - Endometriosis (endometrioma)
  - Torsion of adnexa
  - Torsion of hydatid of Morgagni
  - Rupture of follicle or corpus luteum cyst
  - Ovarian hyperstimulation syndrome
  - Degenerating ovarian tumor
- Uterus
  - Congestive dysmenorrhea
  - Spasmodic dysmenorrhea
  - Abortion
  - Insertion of an IUD
  - Pedunculated uterine myoma
  - Intratumor hemorrhage or infarction
  - Endometritis
  - Adenomyosis

Chronic Pelvic Pain

- Chronic pelvic pain , defined as pelvic pain of at least **6 months** duration
- Chronic pelvic pain affects upward of 15% of women

Treatment options

- Noninvasive therapy include exercise programs, cognitive/behavioral medicine, physical therapy, nutrition, massage, and acupuncture
- Pharmacologic management: Analgesics
  - Acetaminophen or NSAID
  - Opioid

Treatment options

Pharmacologic Management: Adjuvants

- Tricyclic antidepressants
  - Neuropathic condition or interstitial cystitis.
- Anticonvulsants
  - Postherpetic or pudendal neuralgia
- Other adjuvants that are useful for CPP include antihistamines, muscle relaxants, alpha2-agonists, and dextromethorphan.

Treatment options

- Pharmacologic Management: Disease-Specific Medications
  - Interstitial cystitis
  - Irritable bowel syndrome
- Pharmacologic Management: Hormonal Manipulation-
  - Oral contraceptives

    - continuous progestogens, or GnRH agonists.

Treatment options

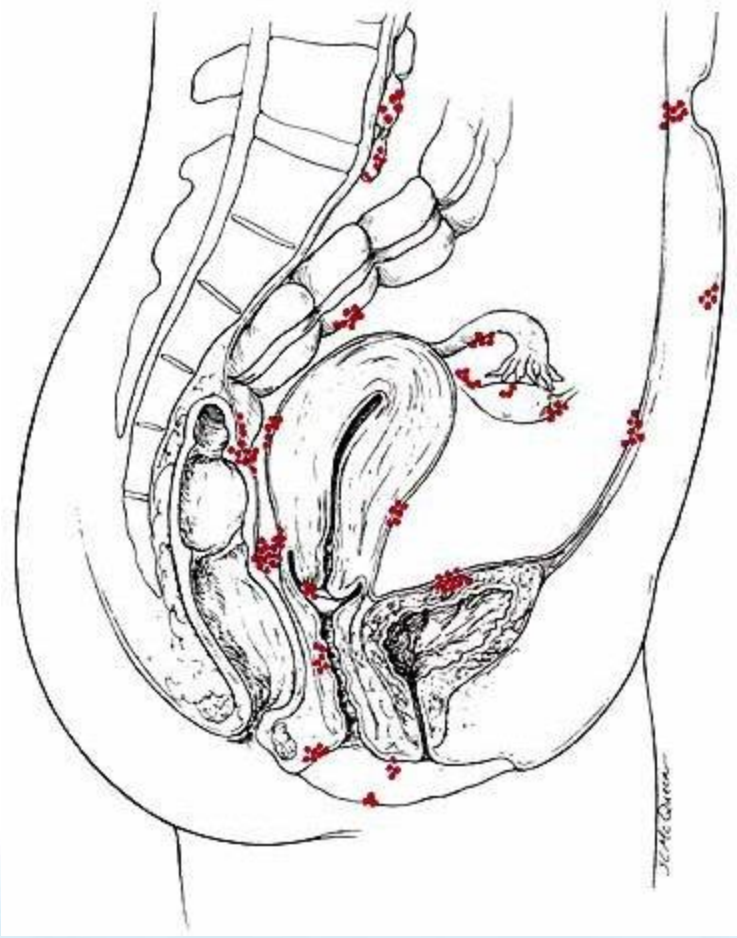
- Invasive therapies
  - Injections:
    - long-acting local anesthetic such as bupivacaine is the local anesthetic of choice.
    - Botulinum toxin A has also been described for abdominal wall trigger point injection with prolonged reductions in pain scores
  - Surgical procedures
    - Neurostimulation
    - Neuroablative procedure
    - Hysterectomy

Endometriosis- incidence

- Incidence: 5% to 15%
- Etiology- uncertain
  - Retrograde Menstruation
  - Metaplasia
  - Lymphatic and Vascular Metastasis
  - Iatrogenic Dissemination
  - Immunologic Defects
  - Genetic Predisposition: first-degree female relatives of an afflicted woman is increased 7 times

Pelvic endometriosis

- Multifocal
- Involving
  - Ovary (50%)
  - Cul-de sac
  - Uterosacral ligament
  - Posterior uterine surface
  - Broad ligament
  - Remaining pelvic peritoneum
  - Bladder (10-15%)
  - Ureter (<1%)
  - Bowel



Clinical Diagnosis

- Typical patients
  - Mid-30s
  - Nulliparous
  - Involuntarily infertile
  - Secondary dysmenorrhea
  - Pelvic pain
- Symptoms
  - Pain
  - Infertility
  - **4 D's of endometriosis**
    - Dysmenorrhea - painful menses
    - Dyspareunia - painful intercourse
    - Dysuria difficult urination
    - Dyschezia - difficult defecation

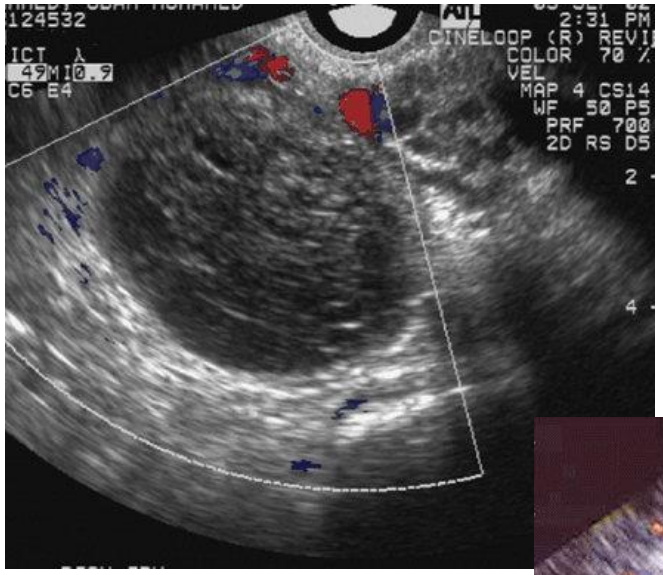
Diagnostic modalities

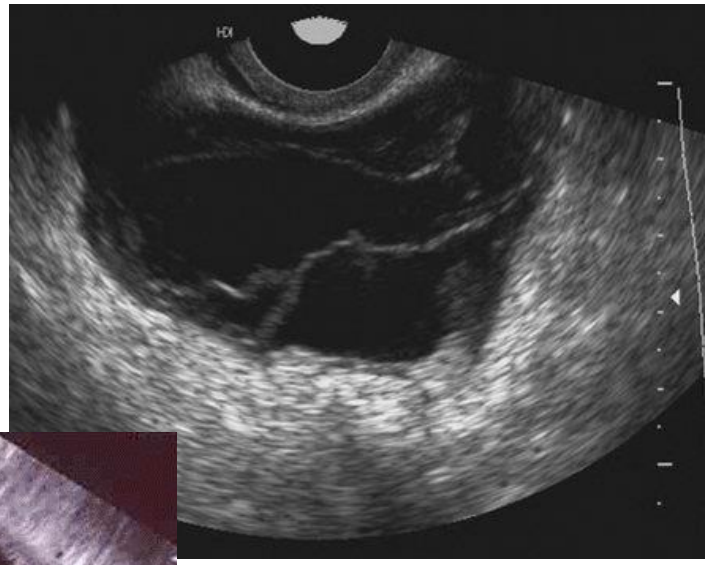
- Laparoscopy
- Transvaginal ultrasonography
- Computed tomography
- Magnetic resonance imaging
  - the best imaging
- CA-125
  - have been used as a biochemical marker of endometriosis.

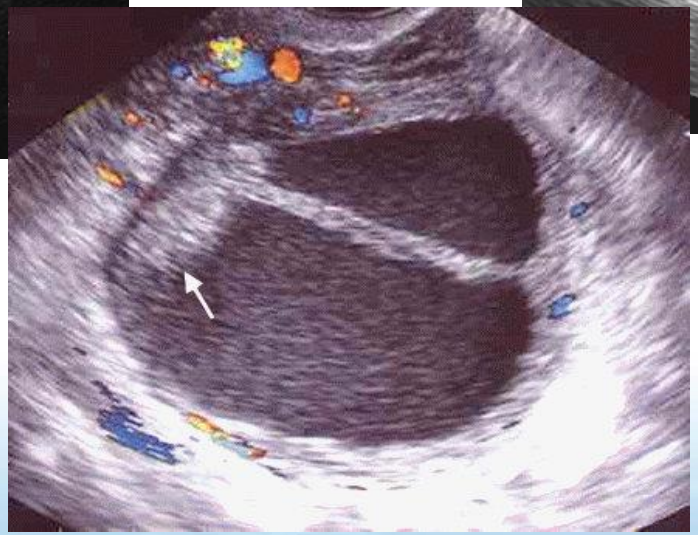
Sonography findings

- Well-defined, unilocular or mulitlocular masses, often diffusely homogenous with low-level echoes (endometriomas, chocolate cysts)
- Occasionally echo patterns of implants may be solid, cystic or complex
- **"Chocolate cysts"** are uniformly echogenic and may be contiguous with an ovary
- Obliteration of pelvic tissue planes

婦科超音波之基本判讀-卵巢囊腫







Staging system for endometriosis

Stage 1: Minimal
Few, superficial lesions on one ovary, uterosacral ligaments or peritoneum

Stage 2: Mild
Superficial lesions on two or more of the above or extensive involvement of one ovary

Stage 3: Moderate
Ovarian cysts, adhesions and scarring

Stage 4: Severe
Deeply invasive lesions and/or severe adhesions

(American Society for Reproductive Medicine 1997)

American fertility society revised classification of endometriosis

- Stage I (minimal): 1-5
- Stage II (mild): 6-15
- Stage III (moderate): 16-40
- Stage IV (severe): >40

Peritoneum	Endometriosis	<1cm	1-3cm	>3cm
	superficial	1	2	4
	deep	2	4	6
Ovary	R Superficial	1	2	4
	Deep	4	16	20
	L superfical	1	2	4
	Deep	4	16	20
	Posterior culdesac obliteration	Partial		Complete
		4		40
Ovary	adhesion	< 1/3 enclosure	1/3-2/3 enclosure	>2/3 enclosure
	R Filmy	1	2	4
	Dense	4	8	16
	L Filmy	1	2	4
	Dense	4	8	16
Tube	R Filmy	1	2	4
	Dense	4	8	16
	L Filmy	1	2	4
	Dense	4	8	16

Therapy options for endometriosis

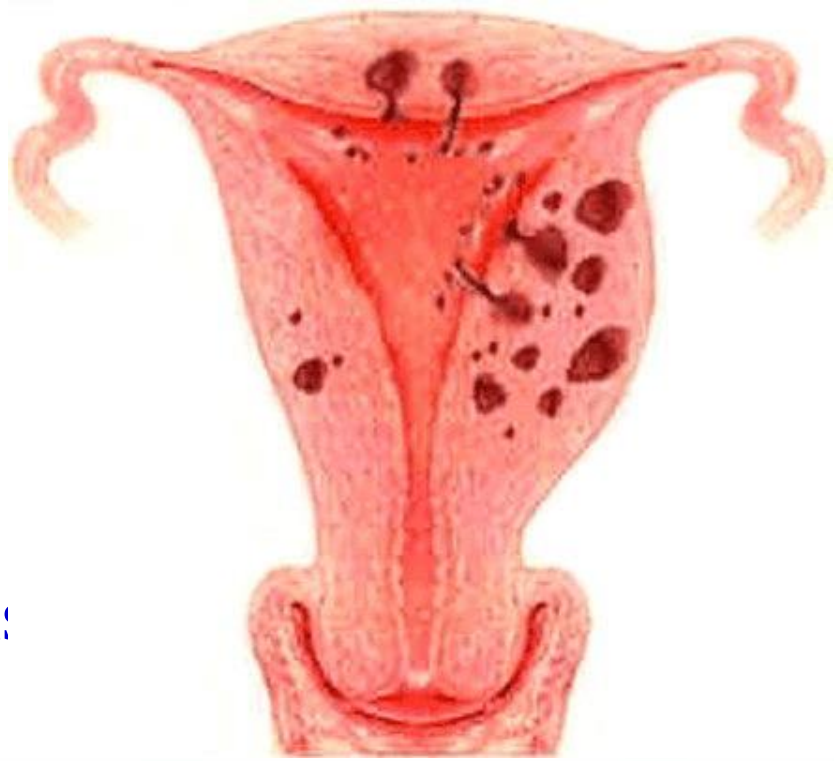
- Observation
- Palliation
  - Analgesics
  - Nonsteroidal anti-inflammatory agents; Prostaglandin synthetase inhibitors
  - Pregnancy
- Endocrine therapy
  - Danazol
  - GnRH agonists
  - Estrogen-progestogens
  - Progestogens
  - Androgens
- Surgical therapy
  - Conservative surgery
  - Procedures for pain relief
  - Definitive surgery

Indications for surgical therapy

- Rupture of endometrioma (a surgical emergency)
- Ureteral or bowel obstruction
- Tuboovarian masses (> 5cm)
- Endometriomas (>8cm)
- Severe, incapacitating symptoms
- Pain worseing with medical therapy
- Infertility for > 1 year despite conventional therapy

Adenomyosis

- The growth of endometrial glands and stroma in the uterine myometrium.
- Hypertrophy of the smooth muscle
- In large isolated areas of adenomyosis, the process resembles a leiomyoma and is termed adenomyoma
- Regresses after menopause
- Unknown etiology



Clinical Diagnosis

- Symptoms
  - Asymptomatic (30%)
  - Hypermenorrhea (50%)
  - Severe acquired premenstrual and menstrual dysmenorrhea (30%)
- Signs
  - Diffused enlarged uterine fundus

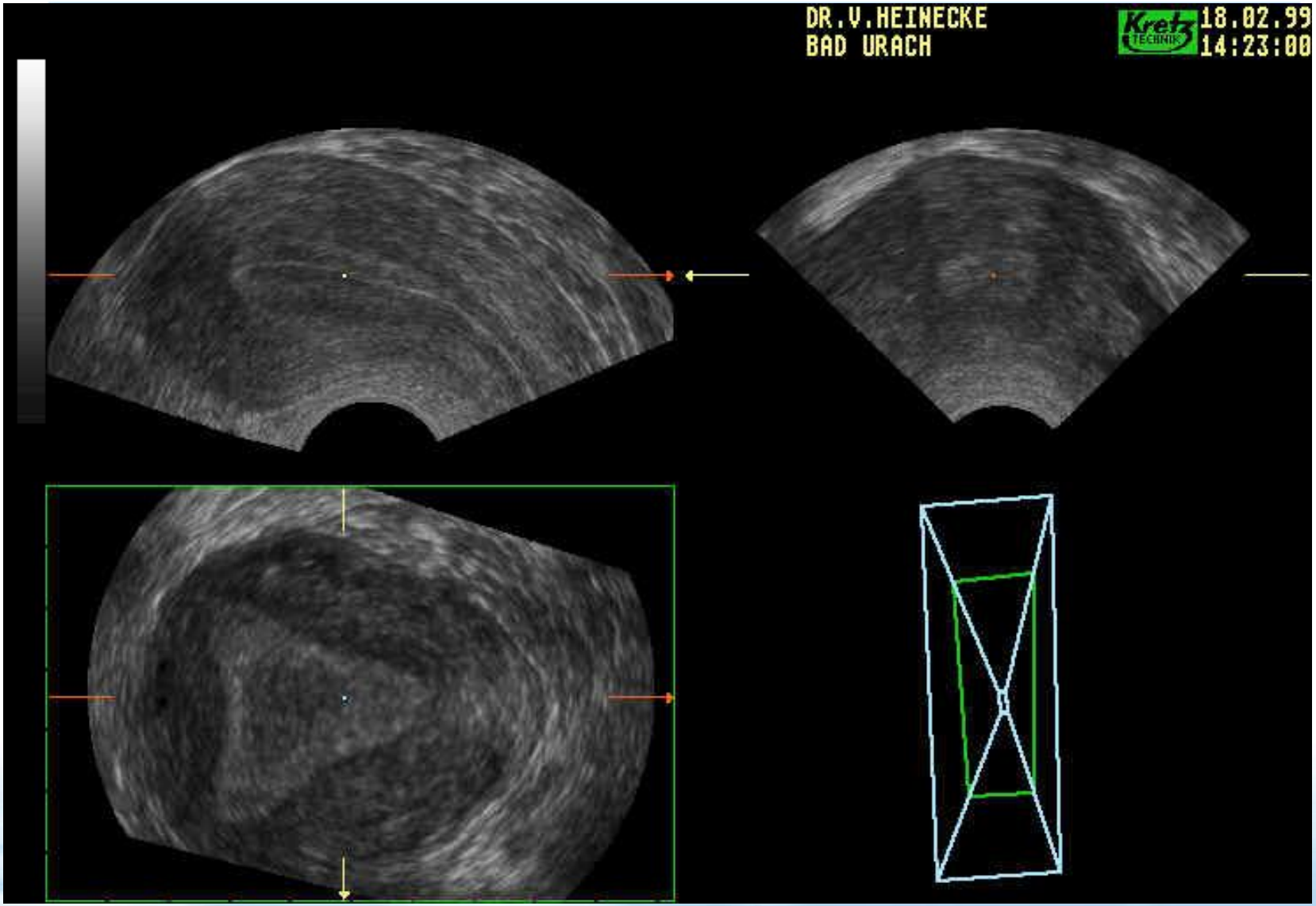
Diagnosis

- An exact diagnosis is often difficult
- Pelvic Exam Findings
- MRI:
  - Distinguish adenomyomas from fibroid tumors
- Transvaginal Ultrasound
- Tissue Diagnosis
  - only definitive method for diagnosing adenomyosis

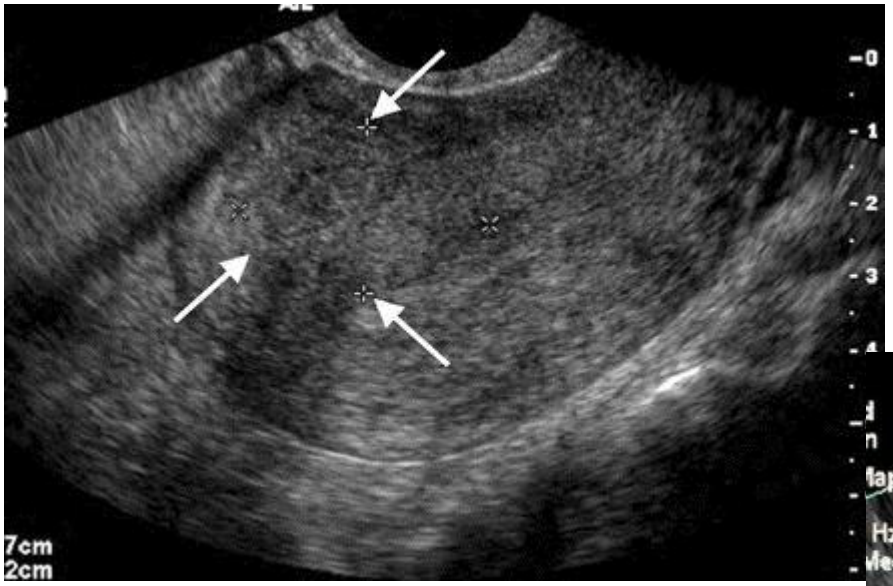
婦科超音波檢查

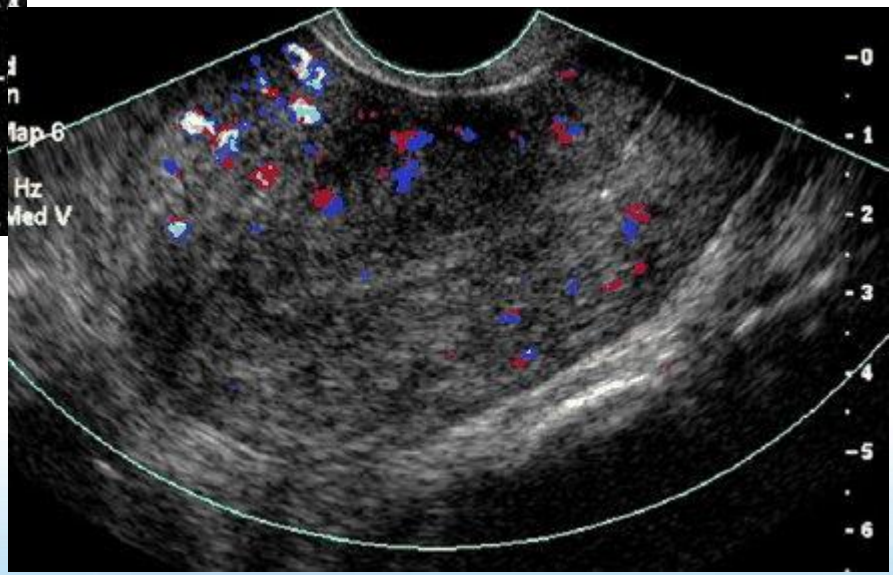
- 依照所用的探頭不同，可分
  - 經陰道超音波：適用於婦科患者，有性經驗的婦女，影像較清楚，不必漲尿，缺點是過大的子宮及卵巢腫瘤不容易看清楚
  - 經腹部超音波：適用於產科患者，或是無性經驗的婦科患者（婦科患者需漲尿之後才能作）
- 主要可以得知子宮大小、內膜厚度、是否有肌瘤、卵巢瘤
- 但對於子宮頸的部分顯影較不清楚

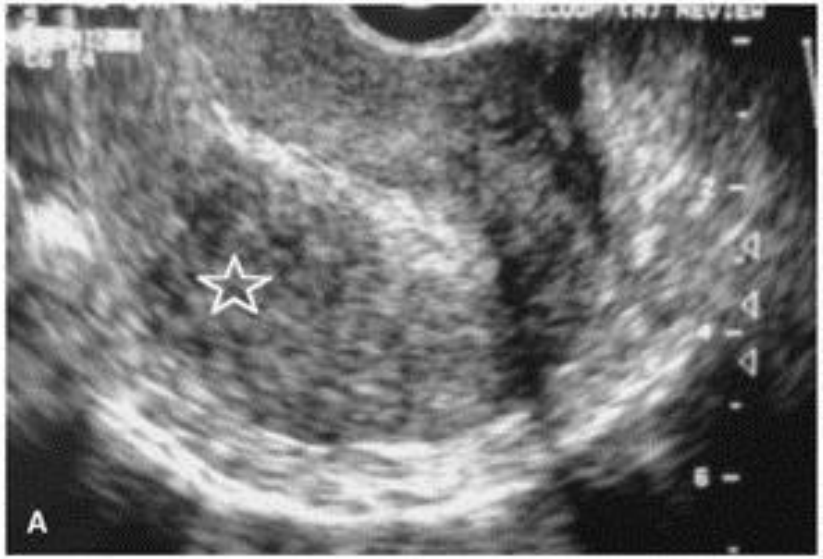
超音波檢查下的子宮



婦科超音波之基本判讀-子宮



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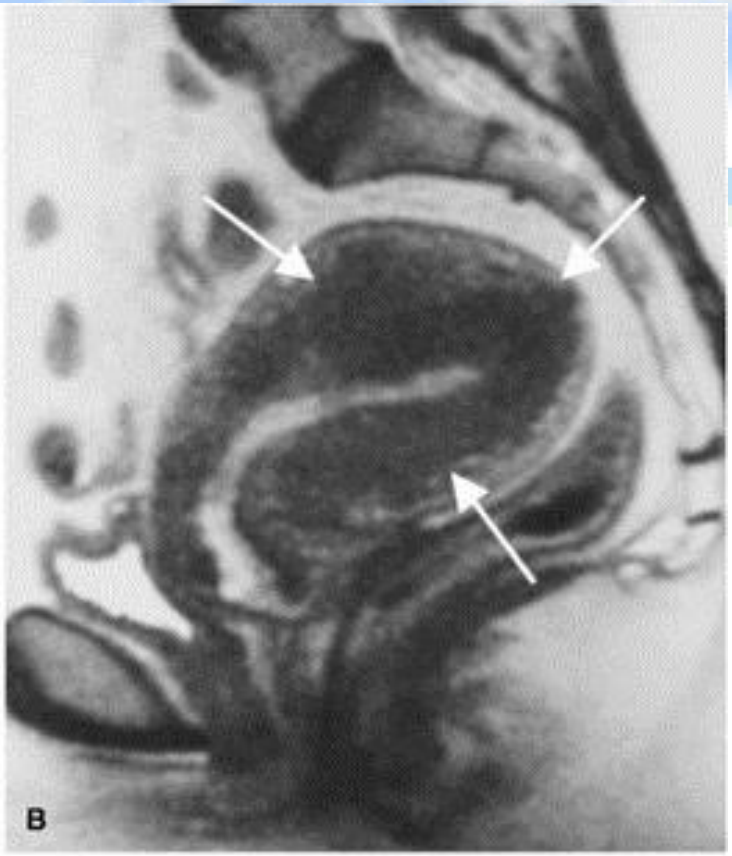
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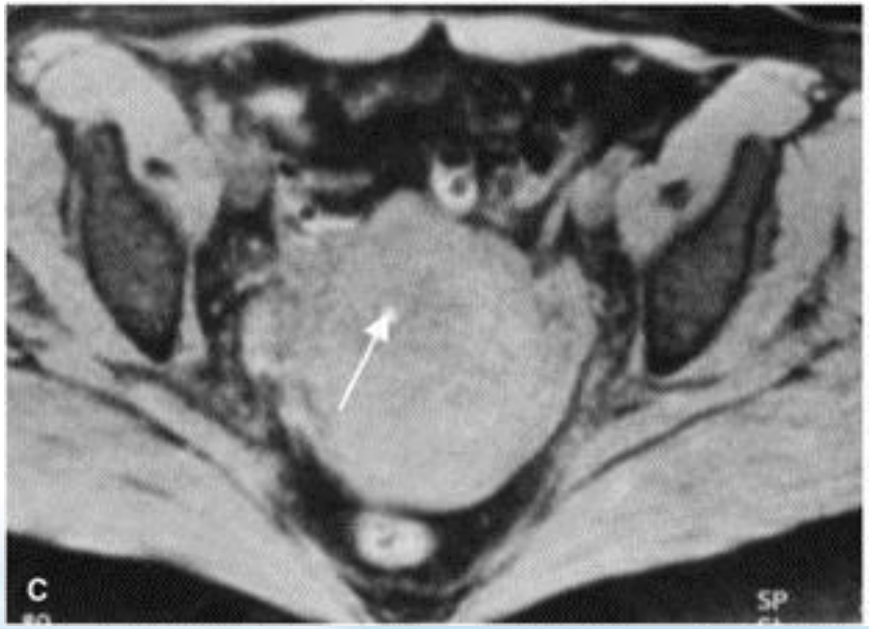
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Management

- **Conservative** medical treatment, including administration of hormones and analgesics.
- **Surgical** treatments include endometrial ablation, laparoscopy, or lesion excision.
- **Uterine artery embolization** is a recent, emerging therapy for adenomyosis as well.
- The only definitive treatment for adenomyosis, however, is total **hysterectomy**

陰道出血

婦產科檢查-內診及窺陰器之擺放

- 內診是一切婦產科檢查的基礎
  - 觀察外陰部有無異狀（例如異常的色素沈積、破皮、水泡、潰瘍、隆起、白化等）
  - 觀察是否有陰道的前後壁膨出
  - 觀察子宮頸
    - 外觀、形狀、顏色、不正常的贅生物
    - 分泌的液體（分泌物顏色，特性）
    - 若需要作抹片檢查者可於內診時同時完成
  - 觸摸子宮底部，可以得知子宮的大小、順便得知子宮表面是否光滑或有突起、以及子宮是前傾或後傾
  - 向兩邊觸摸卵巢，可以得知是否有不正常的卵巢瘤

Abnormal Vaginal Bleeding

History taking

- 年齡
- GYN. Condition
  - 懷孕?
  - 月經史?
  - 是否有規則作抹片檢查?
  - 是否有凝血疾病?
  - 是否有婦科疾病?
  - 是否有服用藥物?

Abnormal Vaginal Bleeding

Description of the pattern of bleeding

- 包括何時開始?
- 出血量?
- 頻率?
- 持續或陣發性之出血?
- Postcoital?是否有合併症狀，例如下腹痛等…。

Abnormal Vaginal Bleeding

Physical examination

- Dermatological: Ecchymotic lesions?
- Abdominal: abdominal mass?
- Pelvic exam: External genitalia and vagina, cervix, uterus and adnexa

Diagnostic testing

- Complete blood count (CBC)
- Urine pregnancy test
- Coagulation studies: platelet count, bleeding time, prothrombin time (PT), partial thromboplastin time (PTT)
- Ultrasound examination
- Pap smear

Vaginal Bleeding Unrelated to Pregnancy

Neoplasms

- Cervical polyps
- Cervical carcinoma
- Uterine leiomyoma
- Adenomyosis of uterus
- Uterine polyps
- Endometrial carcinoma

Vaginal Bleeding Unrelated to Pregnancy

- Functional bleeding
- Ovarian tumors
- Dysfunctional bleeding
- Intrauterine Devices
- Atrophic endometritis/vaginitis
- Medical causes of vaginal bleeding
- Trauma

Vaginal Bleeding in pregnancy

In Early Pregnancy

- Abortion
- Ectopic Pregnancy

In Later Pregnancy

- Premature Labor
- Abruptio Placentae: Painful hemorrhage
- Placenta Previa: Painless hemorrhage
- Uterine dehisence and rupture