D/D of Supra pubic lump & Management of fibroid at different ages

Dr Neha Gupta
Associate Professor,OBG
HIMSR,Jamia Hamdard

Abdomino- pelvic Lump

- Occur at any Age
- From abdominal / Pelvic organs
- Need clinical evaluation
- Specific Investigations

ORIGIN

Uterus

Cervix

Ovary

bowel

Retroperitoneal tissues

Toddlers(<5yrs)

- Ovarian tumor
- Mucocolpos
- Full bladder

5yrs to Puberty

- Ovarian tumor
- Hematocolpos
- Full bladder

Child bearing Age

- Pregnancy
- Full Bladder
- Ovarian Tumor
- Fibroid
- Adenomyosis
- Chocolate/ endometriotic Cyst
- TO mass
- Pelvic hematocele
- Pelvic Abscess
- Encysted Perotonotis
- Pseudocyesis

Post Menopausal

- Ovarian Tumor
- Pyometra
- Sarcoma Uterus

Detailed History

- Age
- Parity
- Symptoms-
- esp. note sudden or gradual
  - Loss of appetite /weight
  - Menstrual irregularity
  - Pain in lower abdomen
  - Pressure symptoms
  - Similar disease in past
  - Past History of TB

Examination

Signs

General condition

- Cachexia
- Pedal edema

- Abdominal Examination
  - Inspection- quadrant, movement with respiration, visible veins
  - Palpation- cystic/solid,mobile/restricted,border-well defined/ **difficult to reach lower pole**
  - Percussion- dull over lump & ascites and resonant over bowel loops, fluid thrill+/-
  - Auscultation- FHS, vascular fibroid- bruit, bowel sounds

Pelvic examination

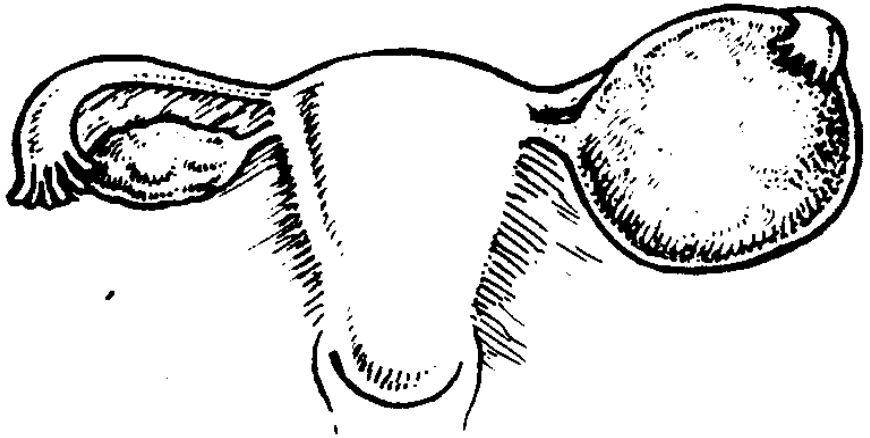
- Bimanual examination for **Ovarian tumor/ TO mass**
  - Uterus separate from mass
  - Groove between uterus & mass
  - Movement of mass per abdomen fails to move cervix
  - Elevation of mass per abdomen, cervix remains stationary
  - Lower pole of cyst can be felt through fornix

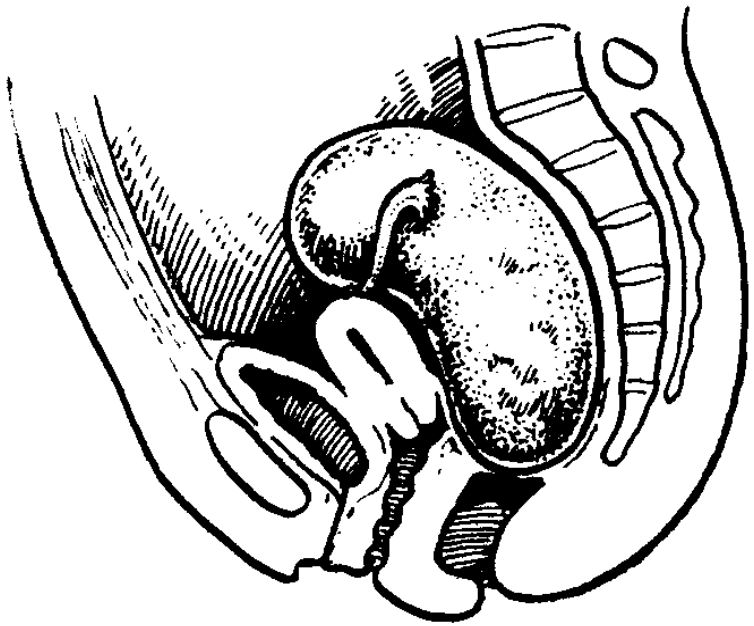
Differential Diagnosis

Ovarian Tumor

CLINICAL FEATURES OF OVARIAN TUMOURS

Small tumours remain in the pelvis and will only be detected on bimanual examination or by ultrasound.

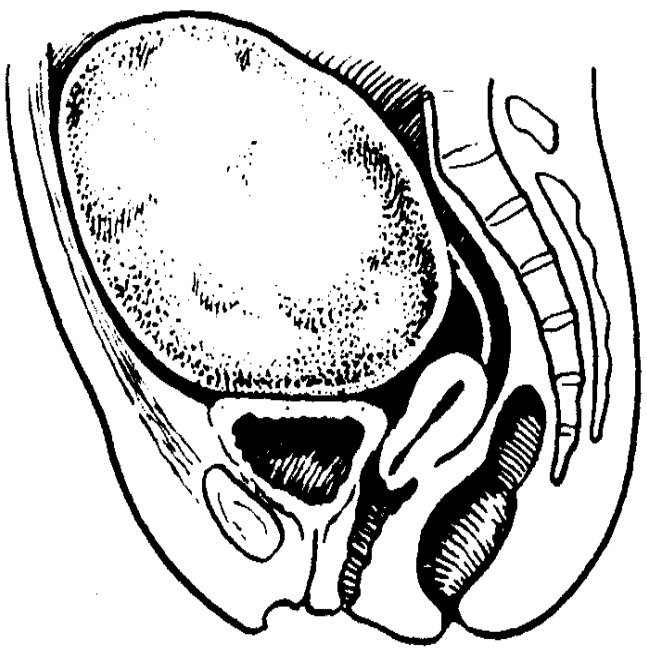


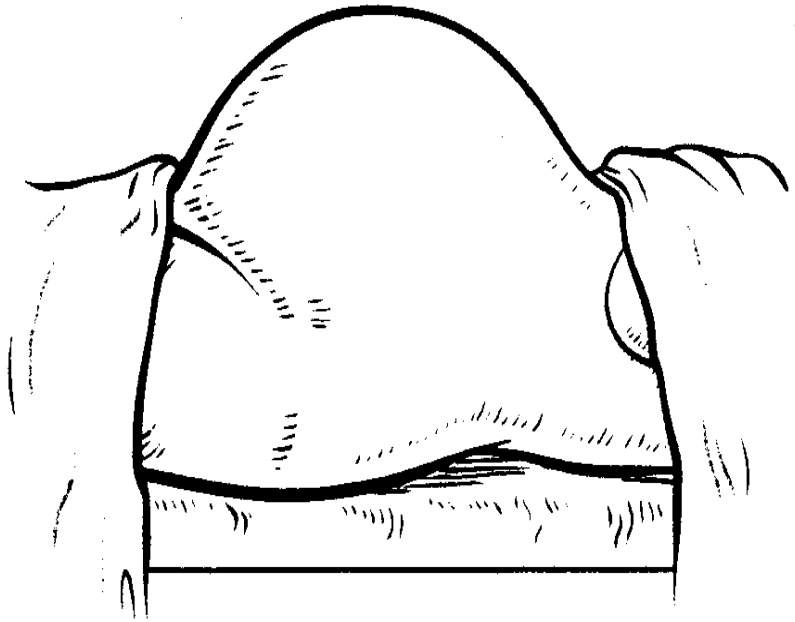


Larger tumours fill the pelvis and usually lie between the uterus and sacrum. If the patient is not too obese the uterus can be distinguished on palpation as separate from the tumour.

A tumour occupying the abdomen causes a midline swelling and is usually tense.

CLINICAL FEATURES OF OVARIAN TUMOURS

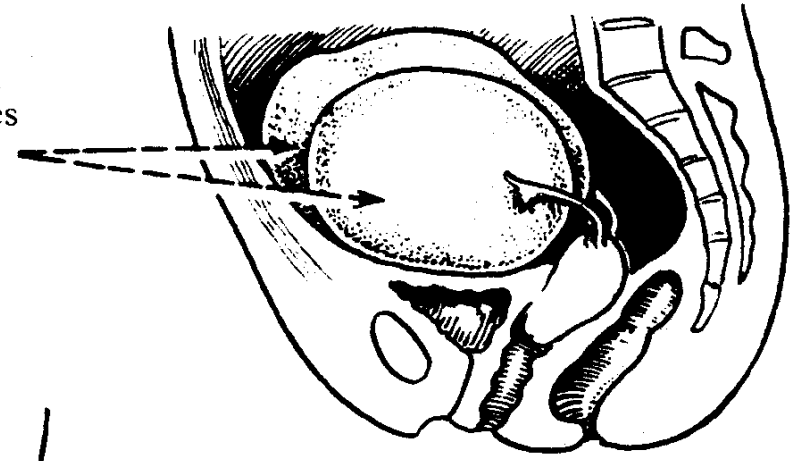


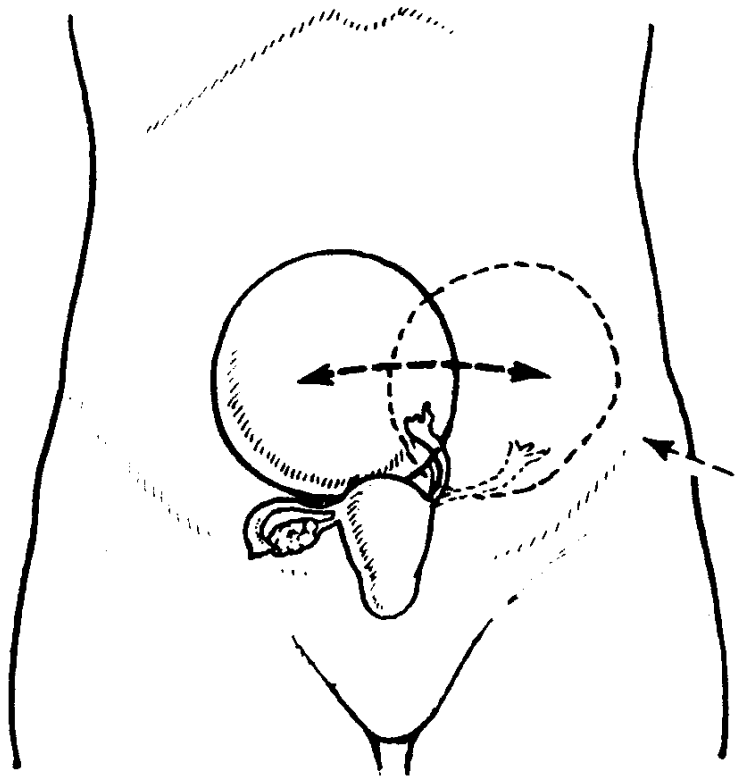


Little can be done at this stage to classify the tumour or exclude malignancy; but very large tumours are likely to be benign; a primarily malignant tumour would have killed the patient before reaching such a size.

CLINICAL FEATURES OF OVARIAN TUMOURS

If the patient is very thin, irregularities may be palpated and sometimes two tumours may be suspected.

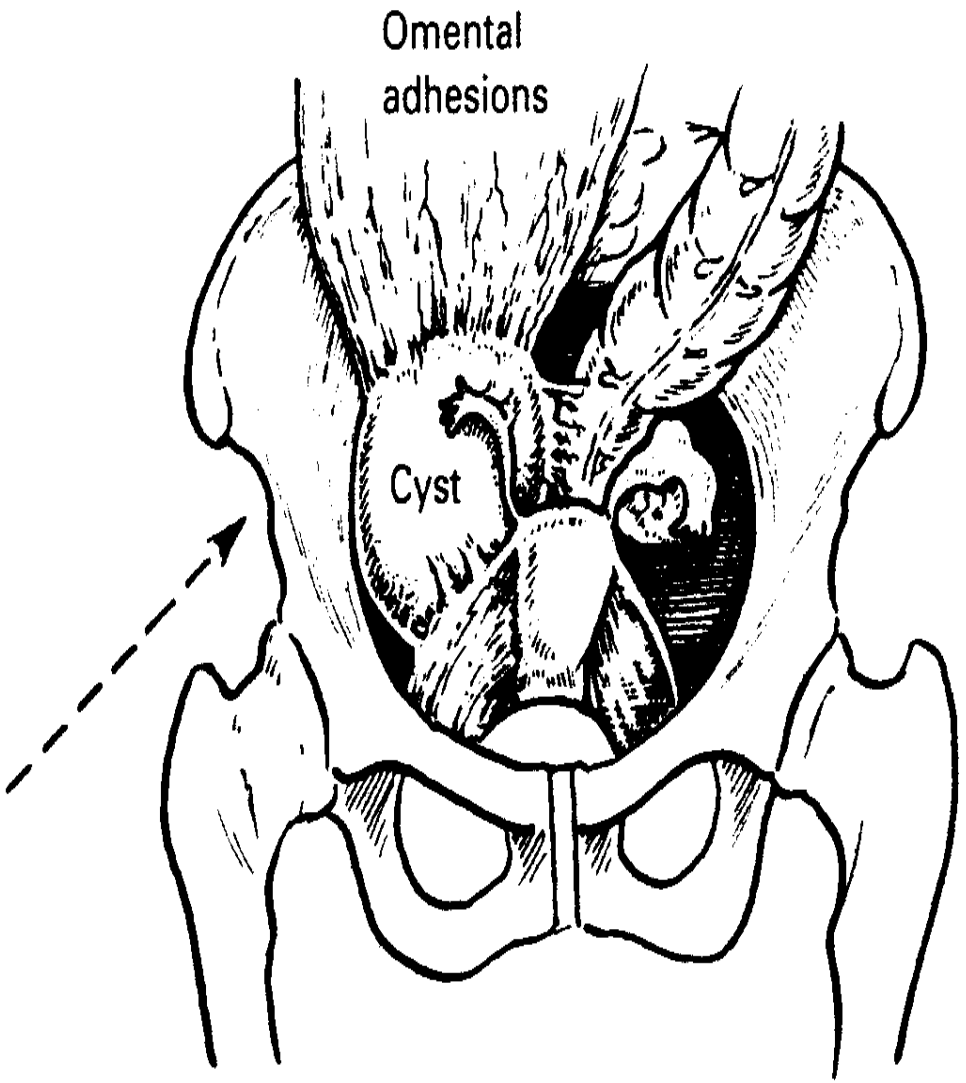




Some tumours of moderate size have a long pedicle composed of the attenuated broad ligament and fallopian tube, which allows the tumour to be displaced from side to side, or to occupy a high abdominal position.

CLINICAL FEATURES OF OVARIAN TUMOURS

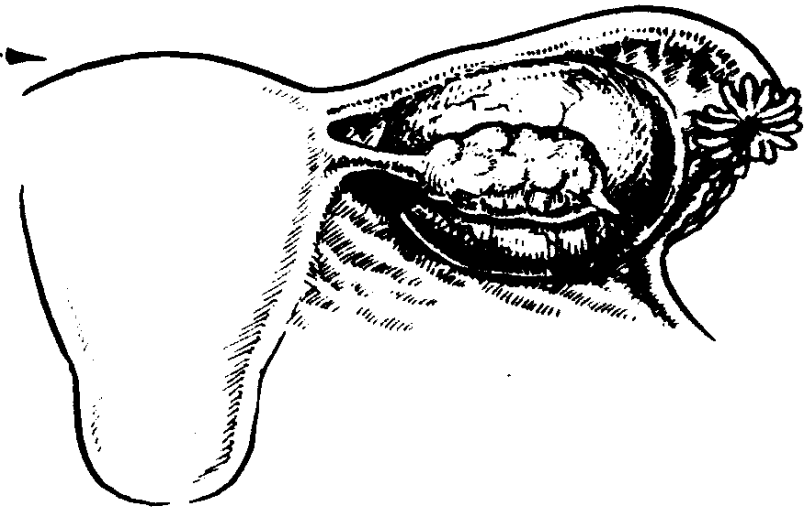
The upper pole can usually be distinguished and the lower pole can be palpated per vaginam. Adhesions, inflammation and displacement of pelvic organs may all exist along with a tumour and confuse the examiner.

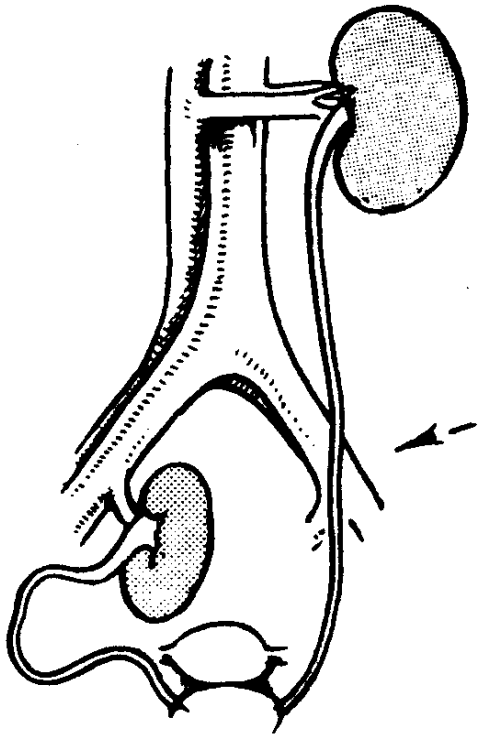


- Ovarian Tumors (Solid/cystic)
  - Benign
  - Malignant
- Chocolate cyst
  - USG &/or MRI
- Encysted peritonitis
  - s/o TB infection
  - Mostly high up, not palpable in PV

DIFFERENTIAL DIAGNOSIS

Broad Ligament Cysts
The distinction is not likely to be made before laparotomy, when the intact ovary is observed on the back of the swelling.





Ectopic Kidney or Spleen
These abnormalities are rare but as they are usually detected for the first time on bimanual examination they must be borne in mind. The ectopic kidney can lie anywhere in the pelvis and derives its blood supply from the iliac vessels. The ureter often runs a tortuous course.

DIFFERENTIAL DIAGNOSIS

General rule

An experienced examiner will diagnose an abdomino-pelvic mass because, in the circumstances, it is the most likely diagnosis.

All abdominal swellings should be subjected to ultrasound

(CT or MRI examination may be required additionally)

Investigations

- Ultrasound (USG) esp with color Doppler
- CT
- MRI- for fibroid mapping
- tumor makers –
  - CA 125
  - AFP
  - Beta HCG
- Examination under anaesthesia
- Laparoscopy / Laparotomy

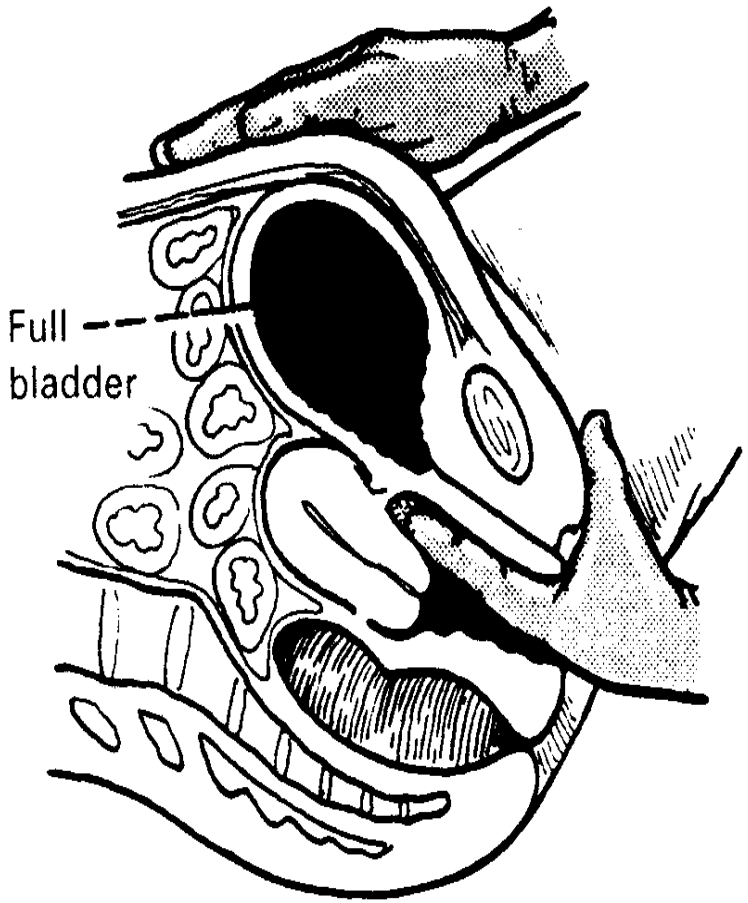
DIFFERENTIAL DIAGNOSIS

- Full bladder
  - Catheterize if retension of urine is suspected
- Pregnancy
  - UPT/ USG

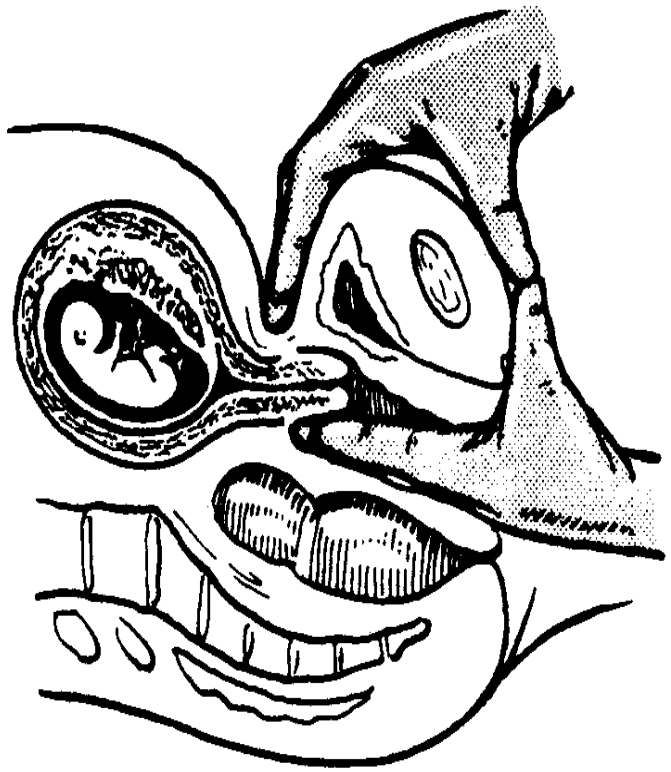
DIFFERENTIAL DIAGNOSIS

Two very obvious mistakes must be avoided.

1. The midline swelling due to a full bladder.



2. The 16-week pregnancy. The gravid uterus at this stage has a very soft isthmic region which can resemble the pedicle of a cyst.



DIFFERENTIAL DIAGNOSIS

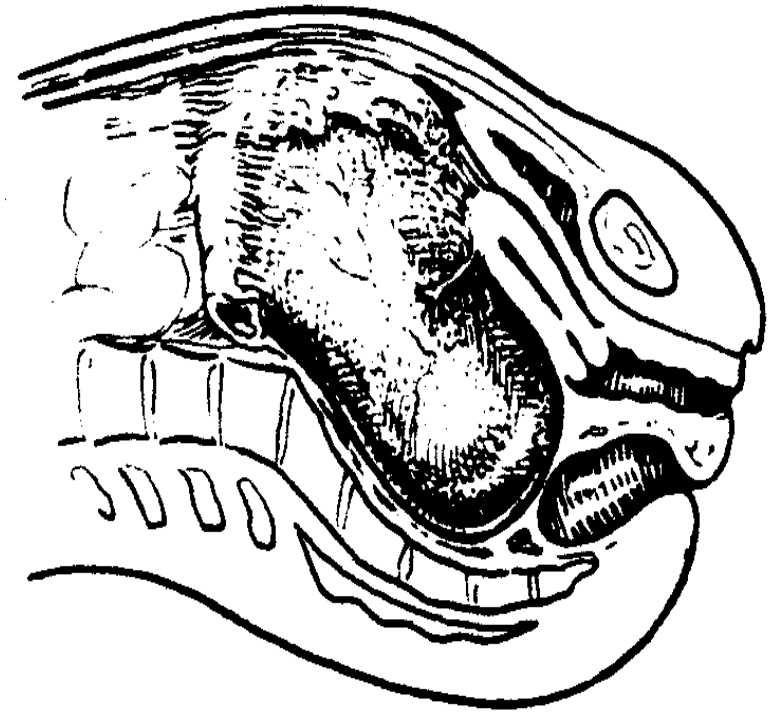
Uterine Fibroids

A large midline intramural fibroid may be impossible to distinguish from a solid ovarian tumor until the abdomen is opened and an entirely different surgical problem encountered.

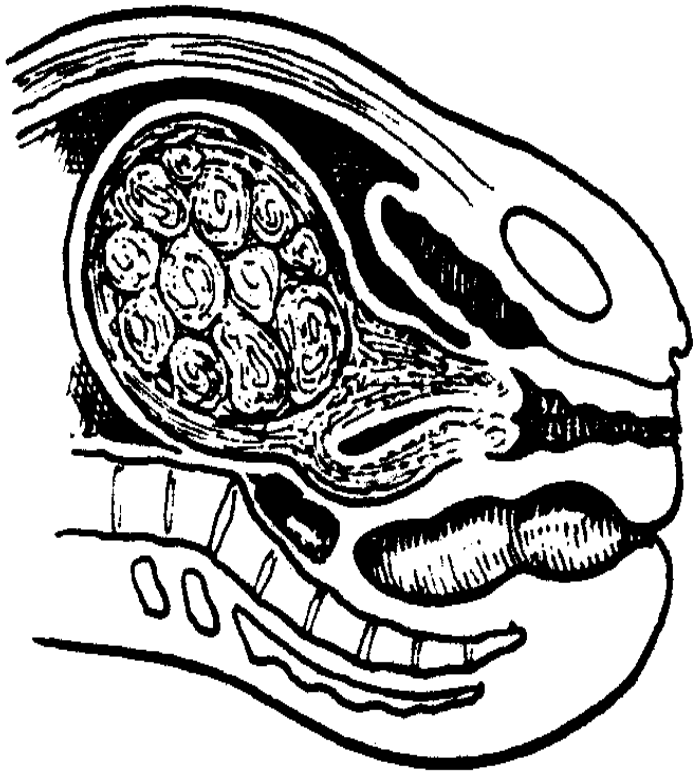
- Fibroid
  - USG
  - Laparoscopy rarely if degeneration of subserous fibroid

DIFFERENTIAL DIAGNOSIS

An ovarian tumour will displace the uterus forwards or downwards where it may sometimes be made out separately on vaginal examination.



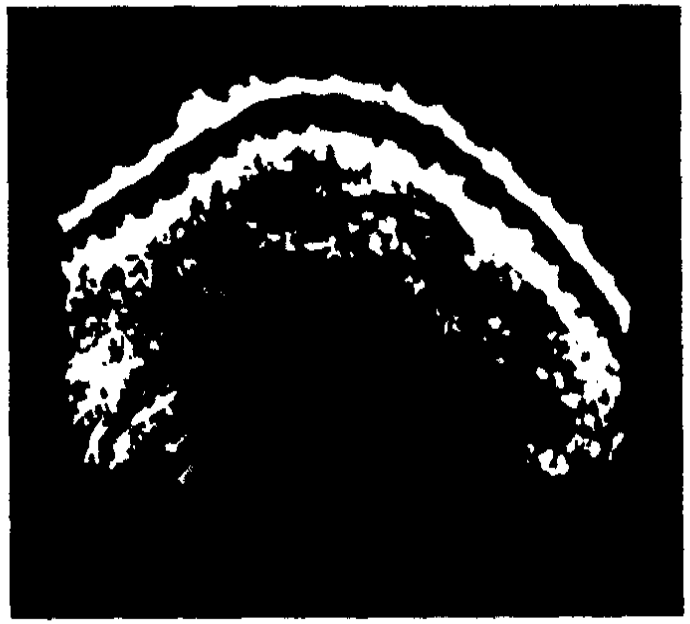
An intramural fibroid will obscure the uterus. The cavity is often elongated.



DIFFERENTIAL DIAGNOSIS

Ultrasound examination should be able to distinguish between fibroid and ovarian cyst; but many ovarian tumours are solid, and some fibroids undergo cystic degeneration. Vaginal ultrasound gives a more detailed picture of the pelvic contents and more precise diagnosis.

Scan of fibroid



Scan of cyst

DIFFERENTIAL DIAGNOSIS

ASCITES

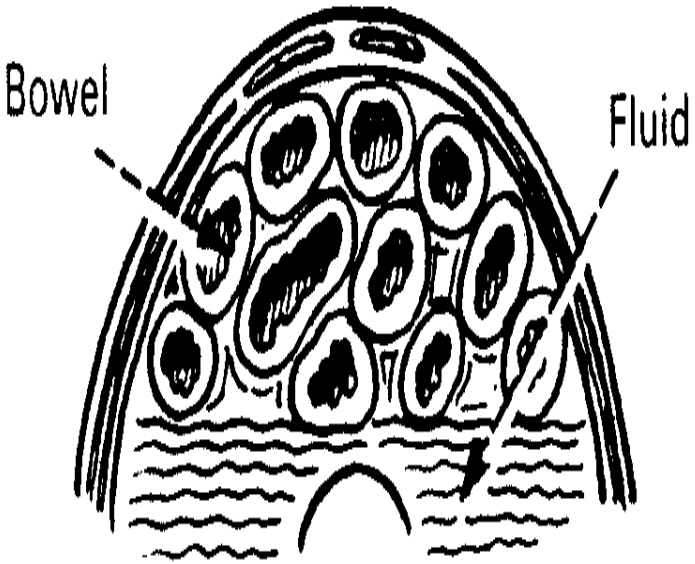
- Fullness in flanks which are dull on percussion
- Centre is resonant as has gut floating on top of ascitic fluid
- Fluid thrill & Shifting dullness may be elicited

A fluid thrill may be elicited from an ovarian cyst, and ascites and tumor may coexist; but as a rule the distinction should be easily made.

DIFFERENTIAL DIAGNOSIS

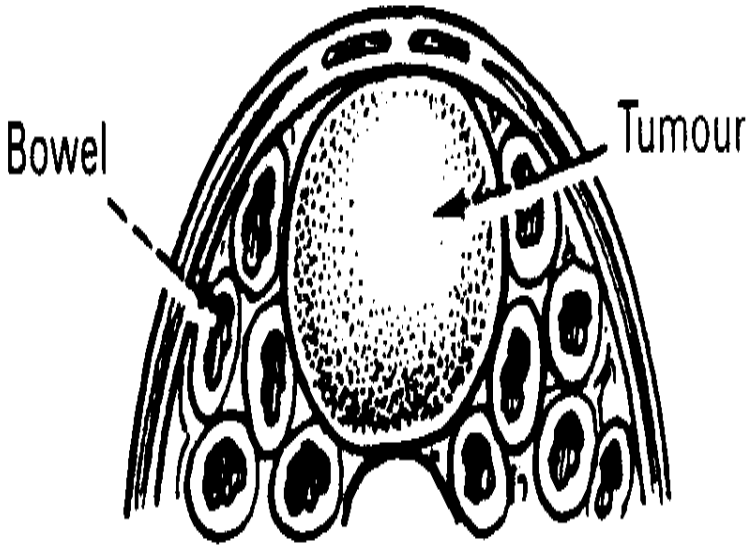
With Ascites

The bowel floats on the fluid. The percussion note is resonant over the top of the swelling and dull over the flanks.



With ovarian cyst

Percussion note is dull over the top of the swelling and resonant in the flanks.

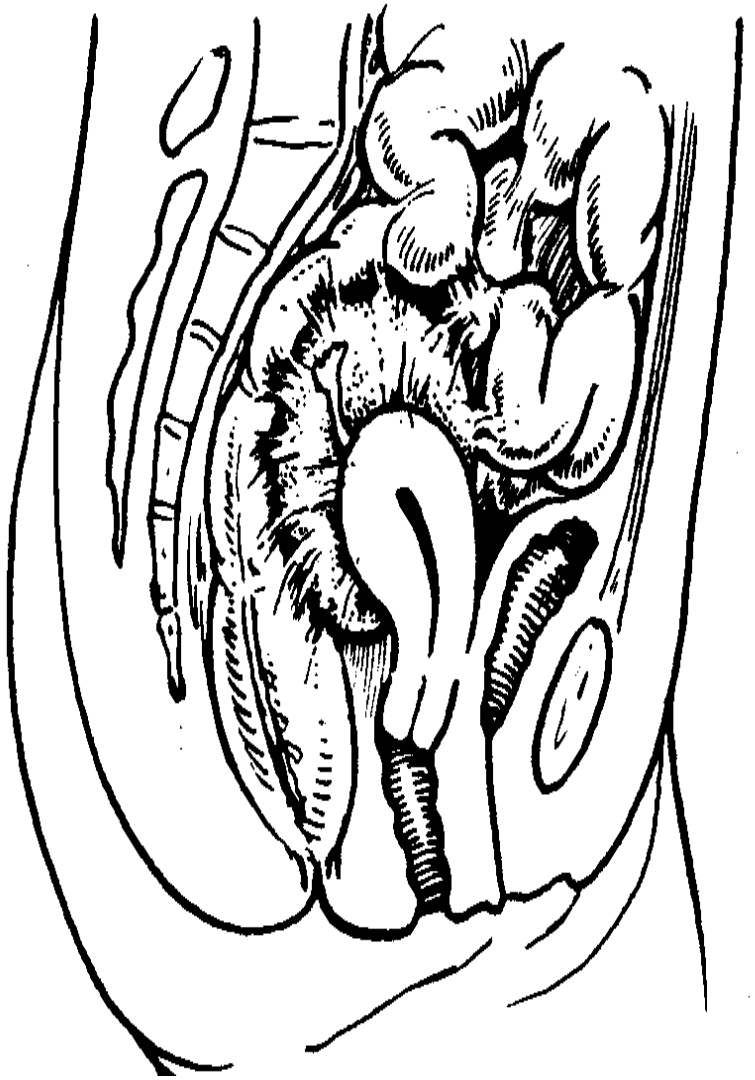


DIFFERENTIAL DIAGNOSIS

Pelvic Inflammation

The swelling palpated *per vaginam* may be due to an adherent mass of uterus, tubes, 'chocolate' ovarian cysts, and bowel.

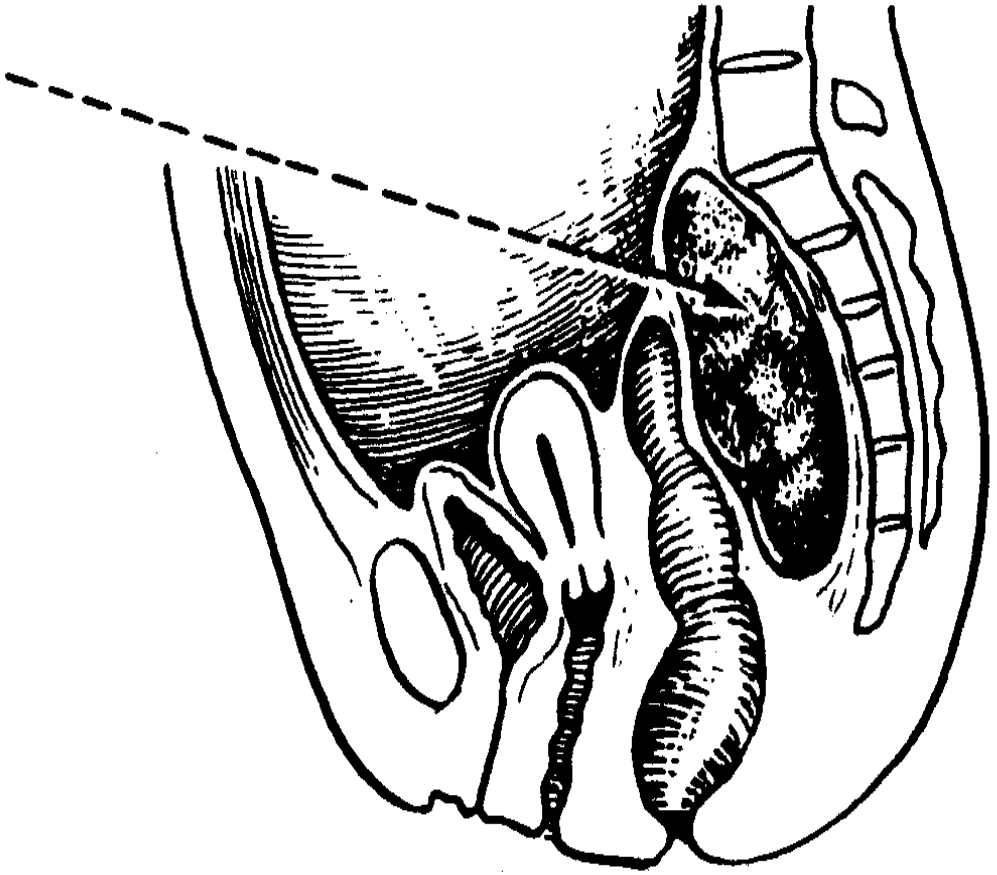
A pyosalpinx, tuberculous or otherwise, may give the same sensation.



DIFFERENTIAL DIAGNOSIS

Retroperitoneal Tumours

Retroperitoneal in the surgical sense means behind the peritoneum of the posterior abdominal wall. Such tumours are rare but may arise from any connective tissue, lipoma being the commonest. Examination reveals a fixed tumour; but the lipoma may be deceptively fluctuant. The tumour may displace the ureter and is in close relation to large vessels.



Management principals of fibroid at different ages

Management of Fibroids

Ultrasonography is the recommended initial imaging modality for diagnosis of uterine fibroids

Management of uterine fibroids should be tailored to the size and location of fibroids; the patient's age, symptoms, desire to preserve fertility, and access to therapy; and the physician's experience.

Expectant management is appropriate for women with asymptomatic uterine fibroids.

In women undergoing hysterectomy for treatment of uterine fibroids, the least invasive approach possible should be chose

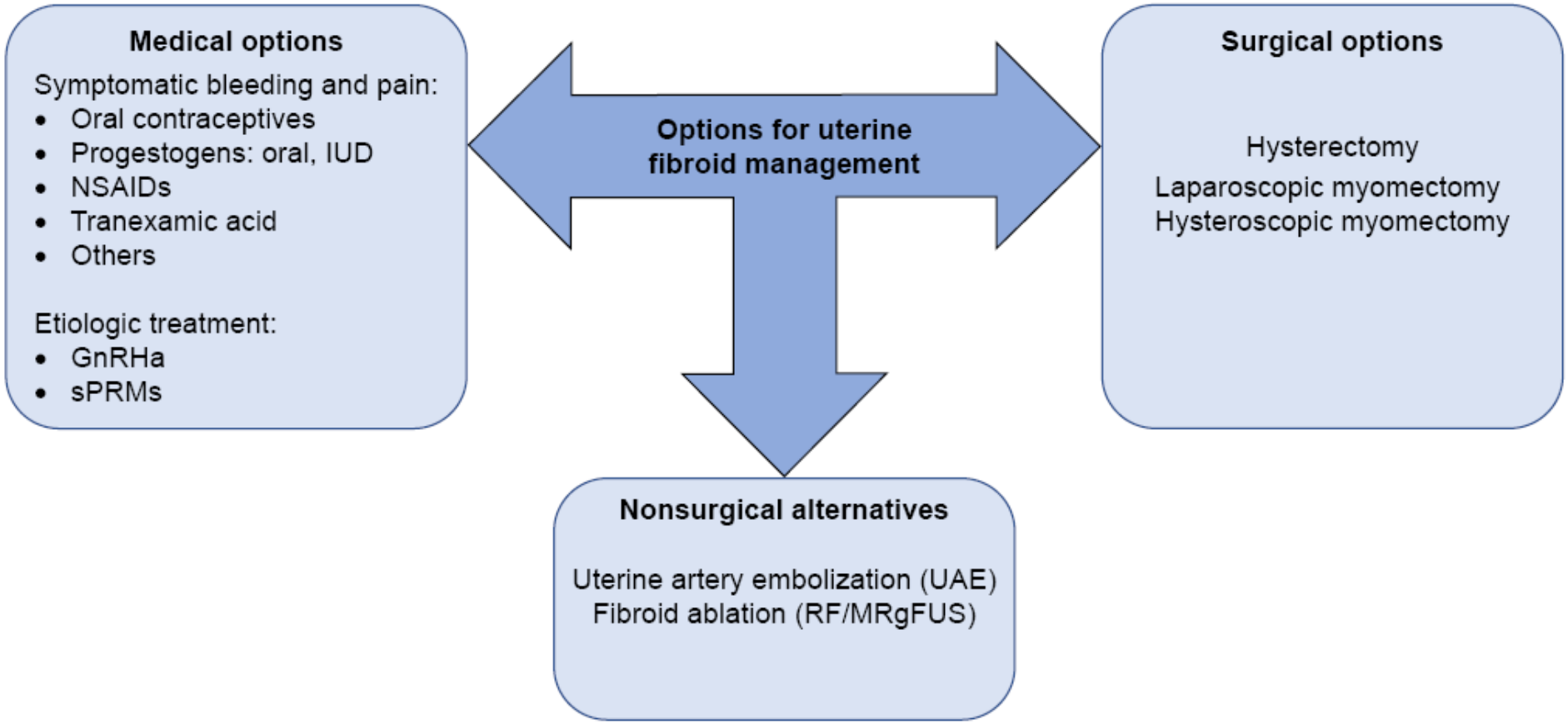
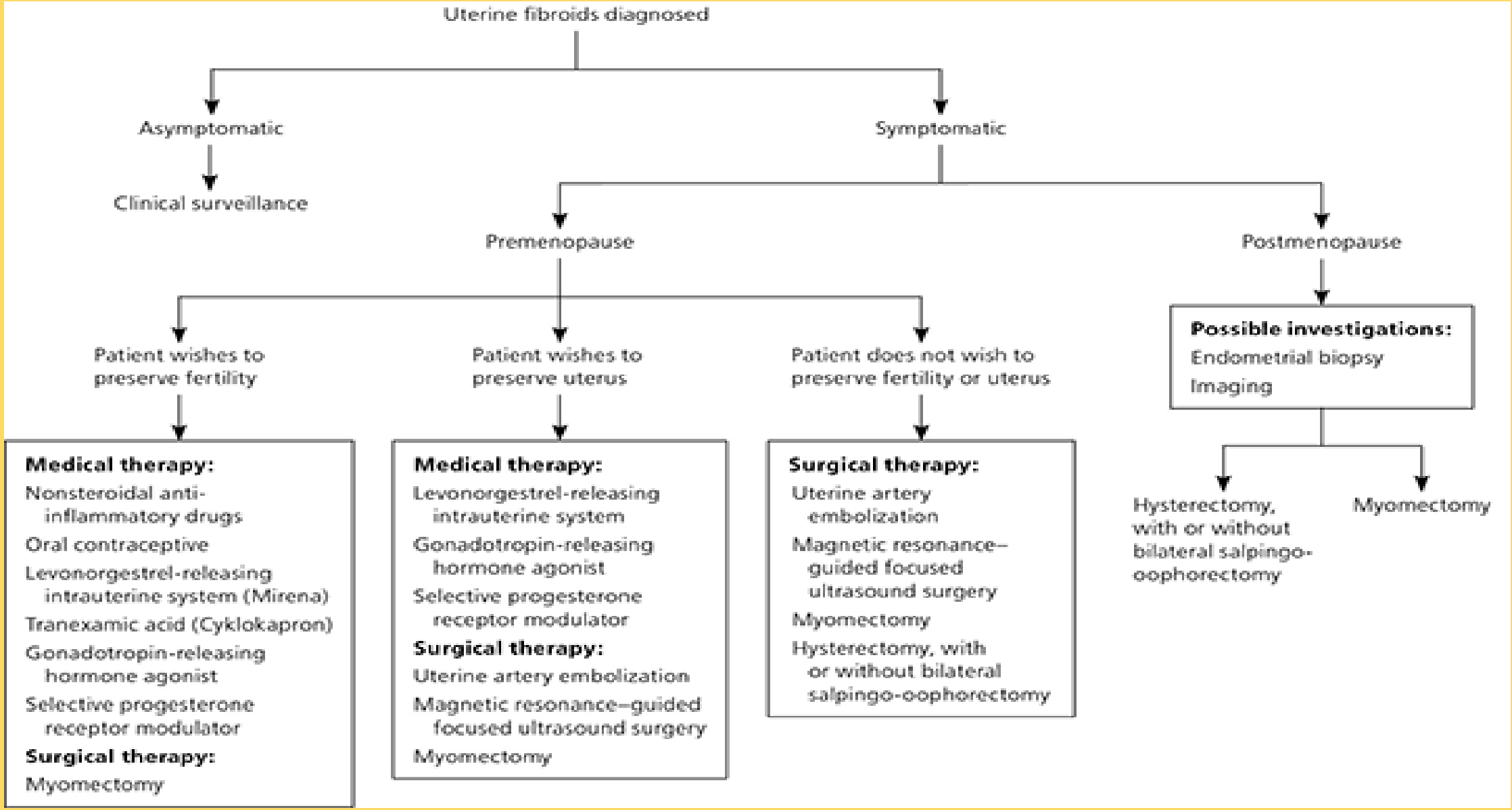


Figure 1 Surgical, nonsurgical, and medical therapy currently used for the management of UFs.

Abbreviations: GnRHa, gonadotropin-releasing hormone agonists; IUD, intrauterine device; MRgFUS, magnetic resonance-guided focused ultrasound surgery; NSAIDs, nonsteroidal anti-inflammatory drugs; RF, radiofrequency ablation; sPRMs, selective progesterone receptor modulators; UAE, uterine artery embolization; UFs, uterine fibroids.


Uterine fibroids diagnosed
Asymptomatic
Clinical surveillance
Symptomatic
Premenopause
Postmenopause
Patient wishes to preserve fertility
Patient wishes to preserve uterus
Patient does not wish to preserve fertility or uterus
Possible investigations:
Endometrial biopsy
Imaging
Medical therapy:
Nonsteroidal anti-inflammatory drugs
Oral contraceptive
Levonorgestrel-releasing intrauterine system (Mirena)
Tranexamic acid (Cyklokapron)
Gonadotropin-releasing hormone agonist
Selective progesterone receptor modulator
Surgical therapy:
Myomectomy
Medical therapy:
Levonorgestrel-releasing intrauterine system
Gonadotropin-releasing hormone agonist
Selective progesterone receptor modulator
Surgical therapy:
Uterine artery embolization
Magnetic resonance–guided focused ultrasound surgery
Myomectomy
Surgical therapy:
Uterine artery embolization
Magnetic resonance–guided focused ultrasound surgery
Myomectomy
Hysterectomy, with or without bilateral salpingo-oophorectomy
Hysterectomy, with or without bilateral salpingo-oophorectomy
Myomectomy

Management of fibroids according to age

- Unmarried – Medical management if symptomatic(correct anemia)
- Infertile woman-
  - Medical management if symptomatic(correct anemia)
  - Avoid any surgery for fibroid unless it interferes with conception
  - If required then do conservative surgery =Myomectomy
  - If during myomectomy endometrial cavity opened, patient must have elective LSCS in future
- Conservative surgery= Myomectomy
  - Open= myoma >10cm, number>5
  - Laparoscopic= myoma<10cm,number <5
  - Hysteroscopic = submucous types (pedunculated(0) or <50%intramural(1)

- Not-desirous of future fertility & symptomatic
  - Definitive surgery = hysterectomy
  - Preferably done in >40years
  - Abdominal=
    - large myoma(>14weeks)
    - Broad ligament myomas
    - Cervical fibroid
  - Vaginal=
    - Uterus <14weeks
    - Laparoscopic same as abdominal

Suggested reading

- Shaws Textbook of Gynecology
- Essentials of Gynecology, Dr Laxmi Seshadri