BENIGN LESIONS of UTERUS

NUR HANISAH BINTI ZAINOREN

CONTENTS

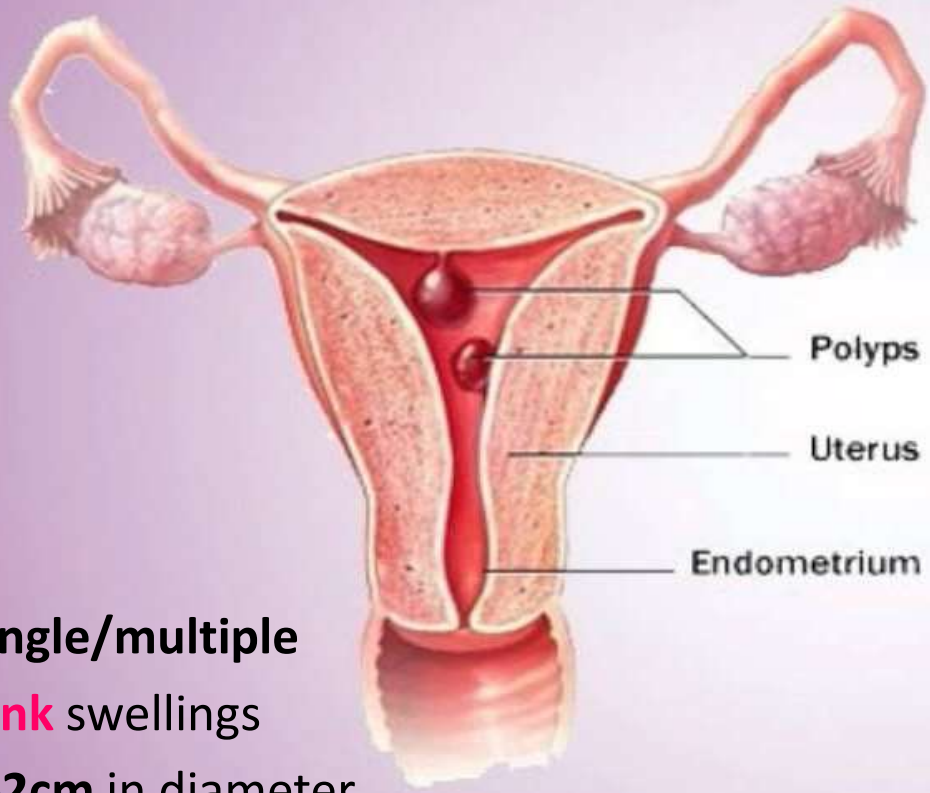
- UTERINE POLYPS
- FIBROMYOMAS
- ADENOMYOSIS

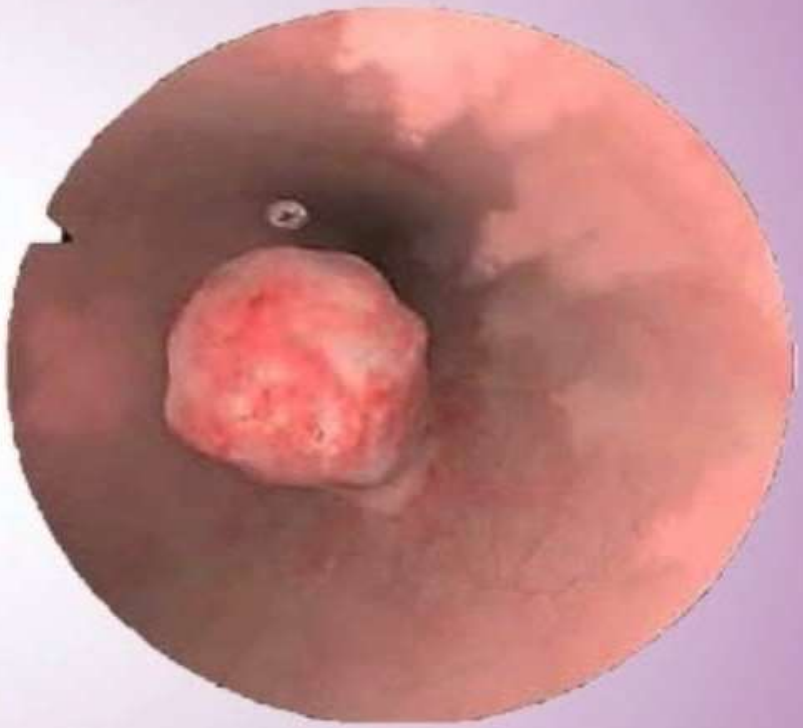
UTERINE POLYPS

Uterine polyps are benign polyps comprising endometrial, fibroid, adenomyomatous and placental polyp

Endometrial polyp

- Mostly arises from **hyperplasia of endometrium**
- Some of the endometrial lining **protruding into the uterine cavity as polyps**
- Composed of **endometrial glands and stroma** covered with a single layer of columnar epithelium
- Secondary malignant change may occur





- **Single/multiple**
- **Pink** swellings
- **1-2cm** in diameter
- With a **pedicle**

Placental polyp

- **Formed from retained placental tissue**

- May cause:
  - Secondary **postpartum hemorrhage**
  - **Intermittent vaginal bleeding** following an abortion or normal term delivery

Clinical features

- **Menorrhagia**
- **Metrorrhagia**
- **Postmenopausal bleeding**
- **Postcoital bleeding** (if it protrudes through the os)

Diagnosis

- Clinically, uterine polyp may not be evident and *uterus may or may not be enlarged*
- It is *easy to diagnose when the polypus protrudes through the cervical canal*

- **Ulrasound** can detect the uterine polyp
- **Saline sonosalphingogram/hysterosalphingogram**

Management

- **D&C** can scrape the polyp
- **Hysteroscopic removal** of multiple polyps may be desirable to ensure their complete removal.

FIBROMYOMAS

Other names

= Fibroids

= Leiomyomas

= Myomas

Commonest benign tumor of the **uterus**

Commonest benign tumor **in female**

Tumor is composed of **fibrous connective tissue** and **smooth muscle**

fibromyoma

- Incidence:
  - At least 20% of women at the age of 30 have got fibroid in their wombs
  - **50% remains asymptomatic**
  - Incidence higher in **black women**
  - More common in **nulliparous/one child infertility**

Prevalence:

highest between 35-45 years

(childbearing age group)

Rarely before 20 years

Risk factors for fibroid

Increase

- Nulliparity
- Obesity
- Hyperestrogenic state
- Black women

Decrease

- Multiparity
- Smoking
  - (due to associated hypoestrinism)

Predominantly an **estrogen-dependant tumor**

- Evidenced by:
  - Potentially limited during child-bearing period
  - Increased growth during pregnancy
  - Rarely occur before menarche
  - Cessation of growth and there is no new growth at all following menopause
  - Contain more estrogen receptors than the adjacent myometrium
  - Frequent association of anovulation

GROWTH

Not squarely distributed amongst the fibroids which are usually multiple

Some grow faster than the others

On the whole, rate of growth is

Takes about **3-5 years** for the fibroid to grow sufficiently **to be felt per abdomen**

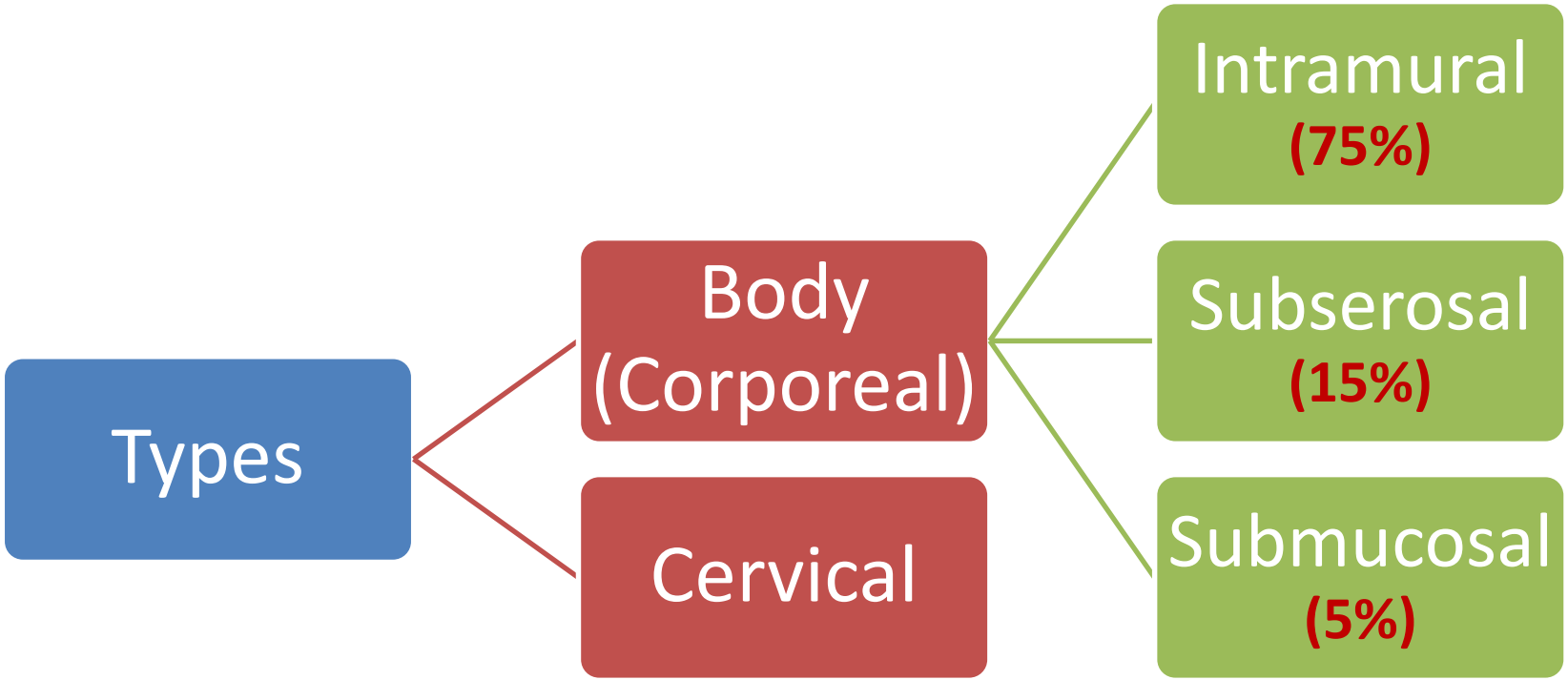
grows ***RAPIDLY***

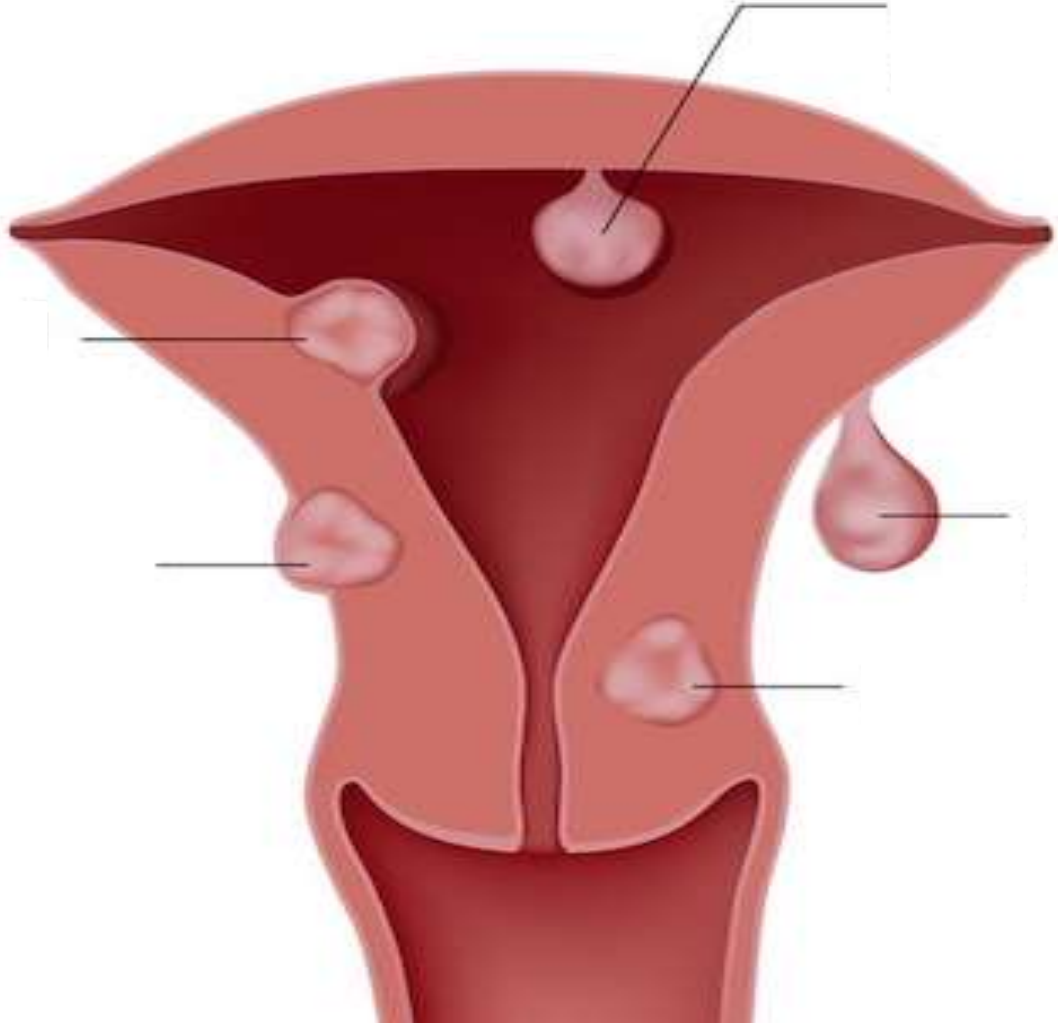
→ During **pregnancy**

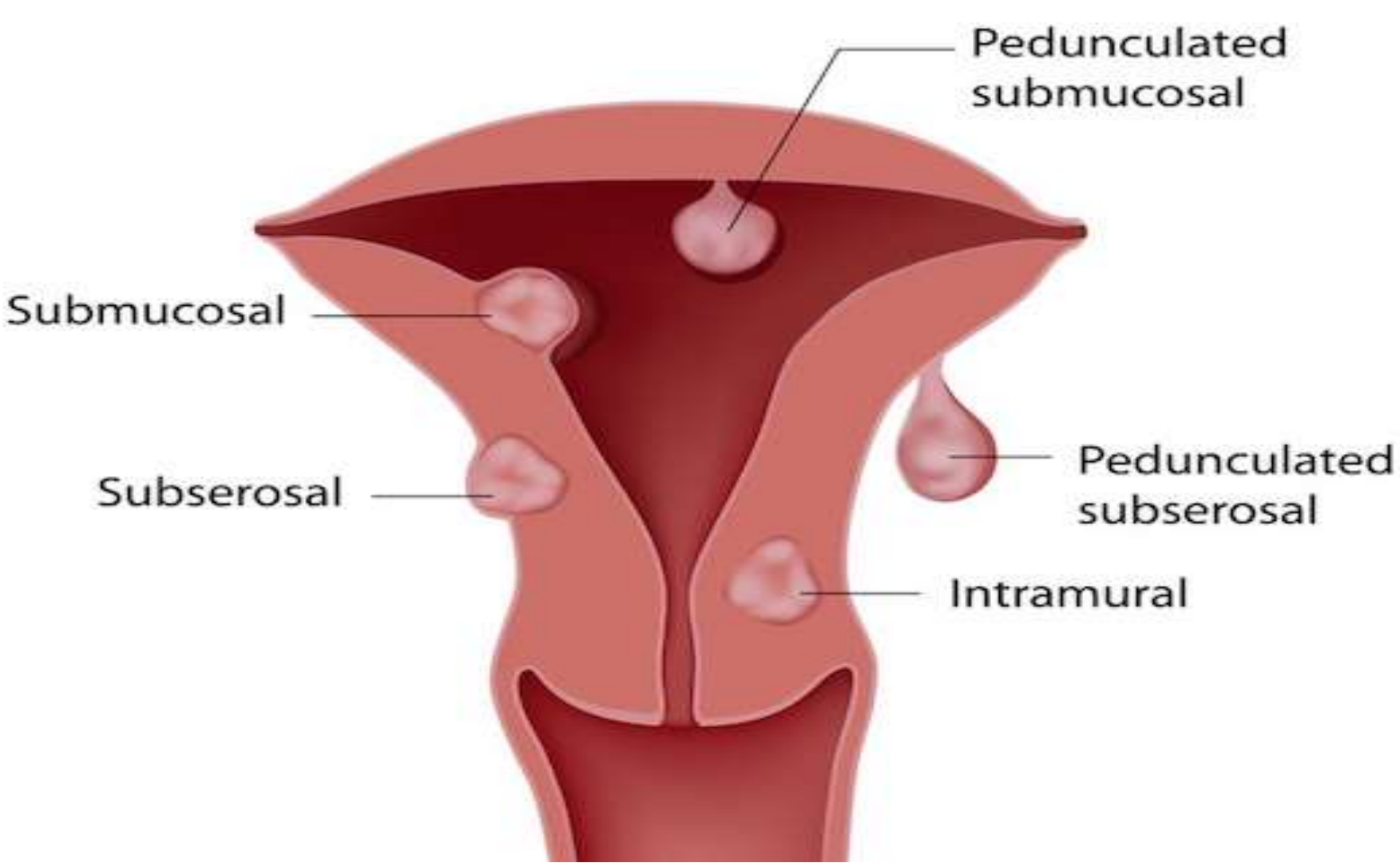
→ Amongst **pill users** (high dose pills)

→ Due to **malignant change**

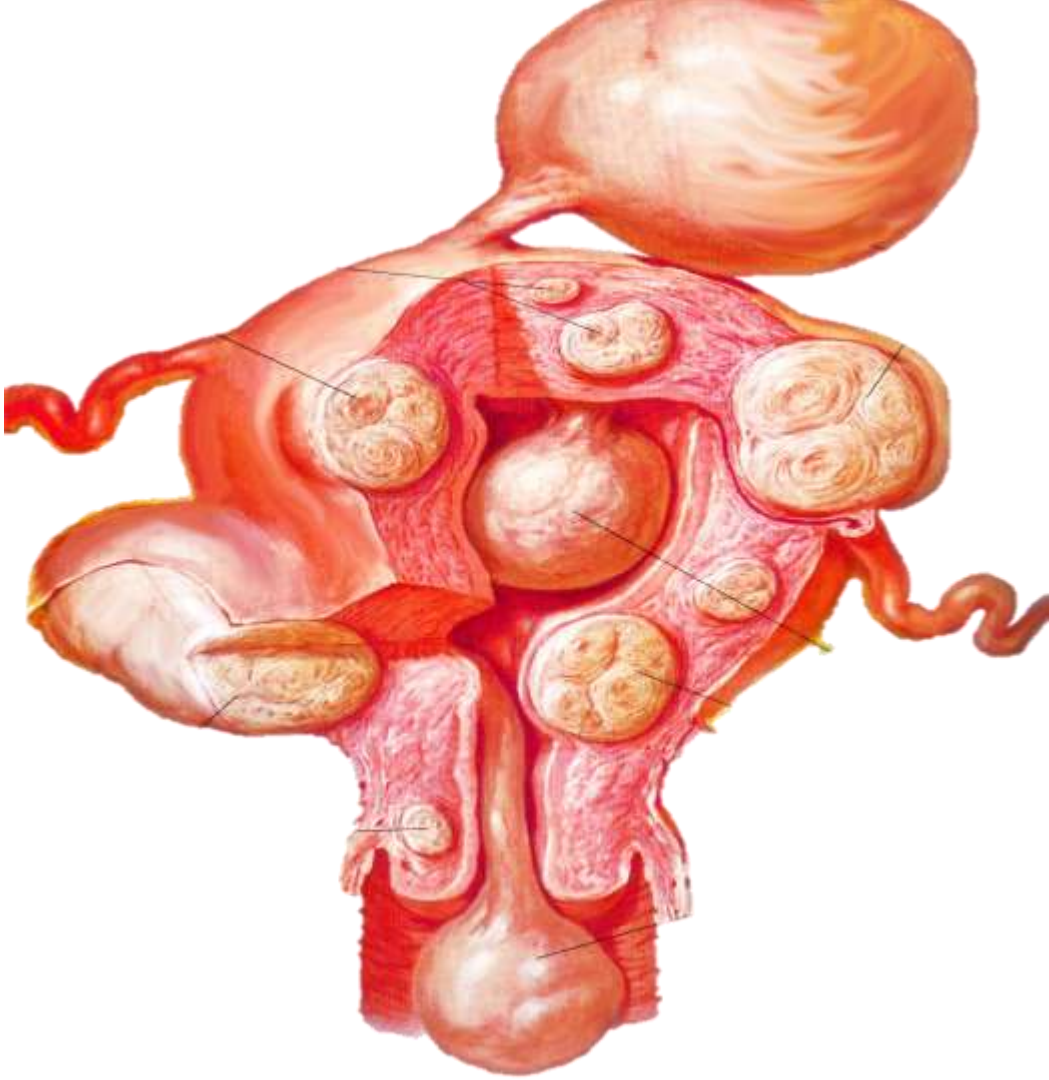
***the newer low dose OCP are not associated with increase in the growth of a fibroid**


Types
Body (Corporeal)
Cervical
Intramural (75%)
Subserosal (15%)
Submucosal (5%)




Pedunculated submucosal
Submucosal
Subserosal
Pedunculated subserosal
Intramural

Fibroids are **usually located in** the **body** and are usually **multiple**

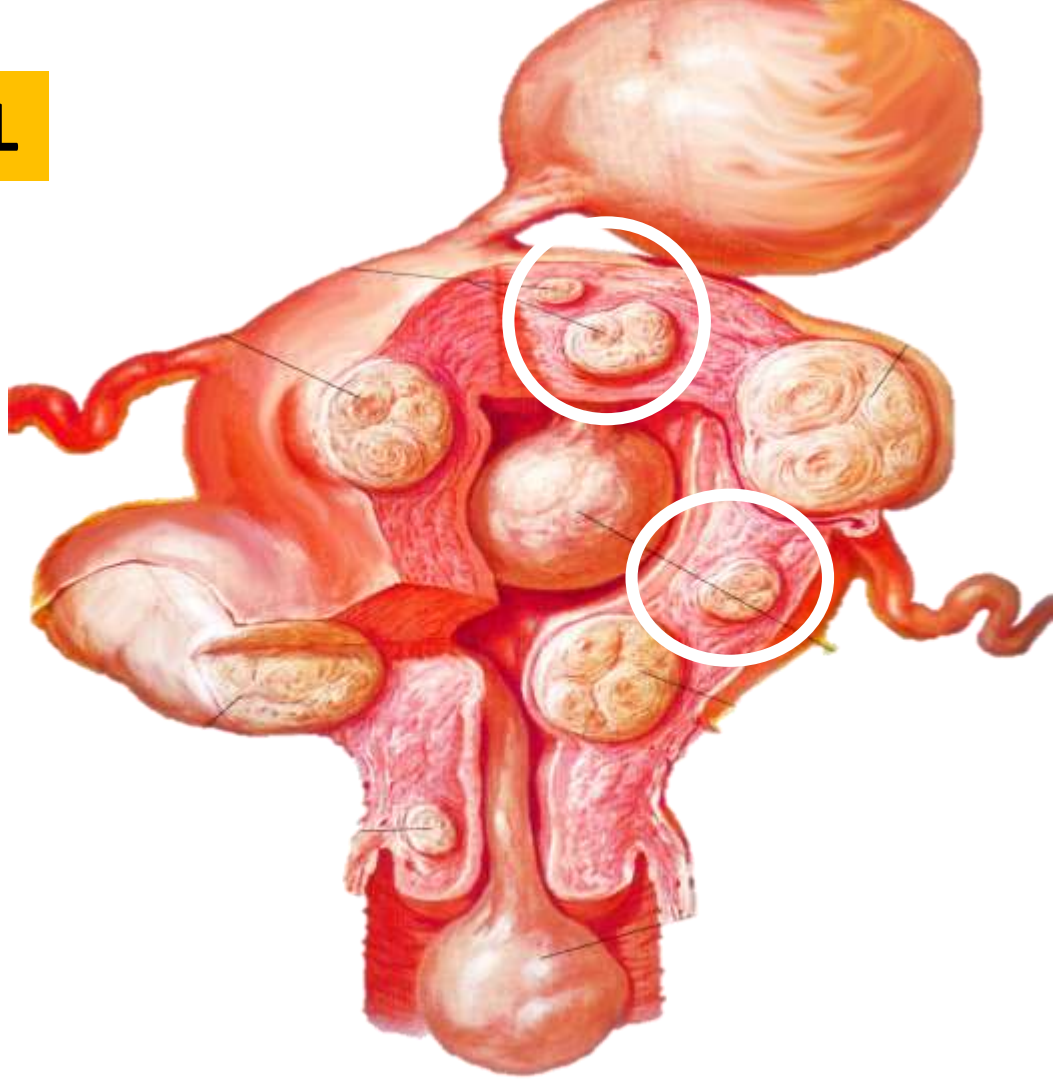


INTERSTITIAL/INTRAMURAL

Initially, fibroids are intramural in position but subsequently, some are pushed outward or inward

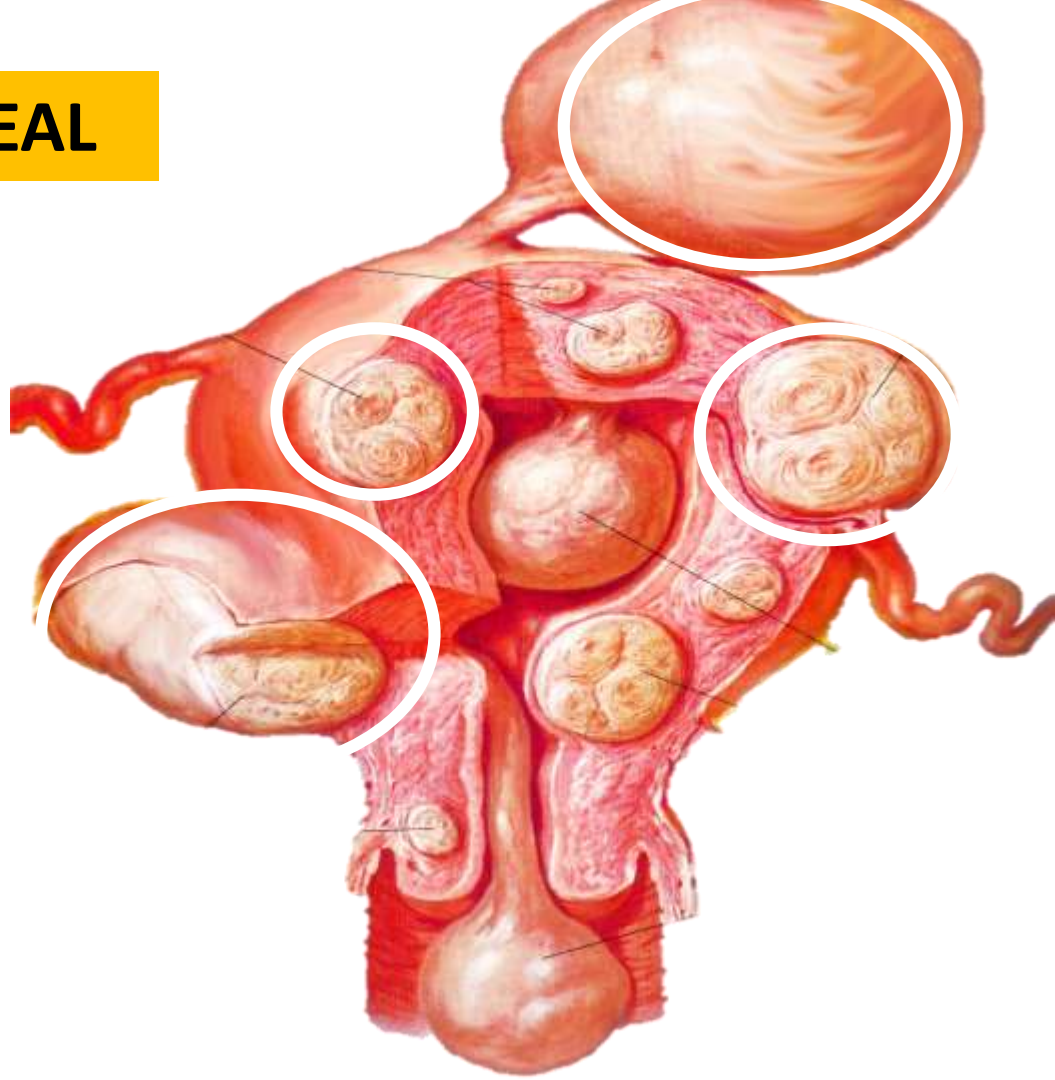
about 70%

persist in that position



SUBSEROSAL/SUBPERITONEAL

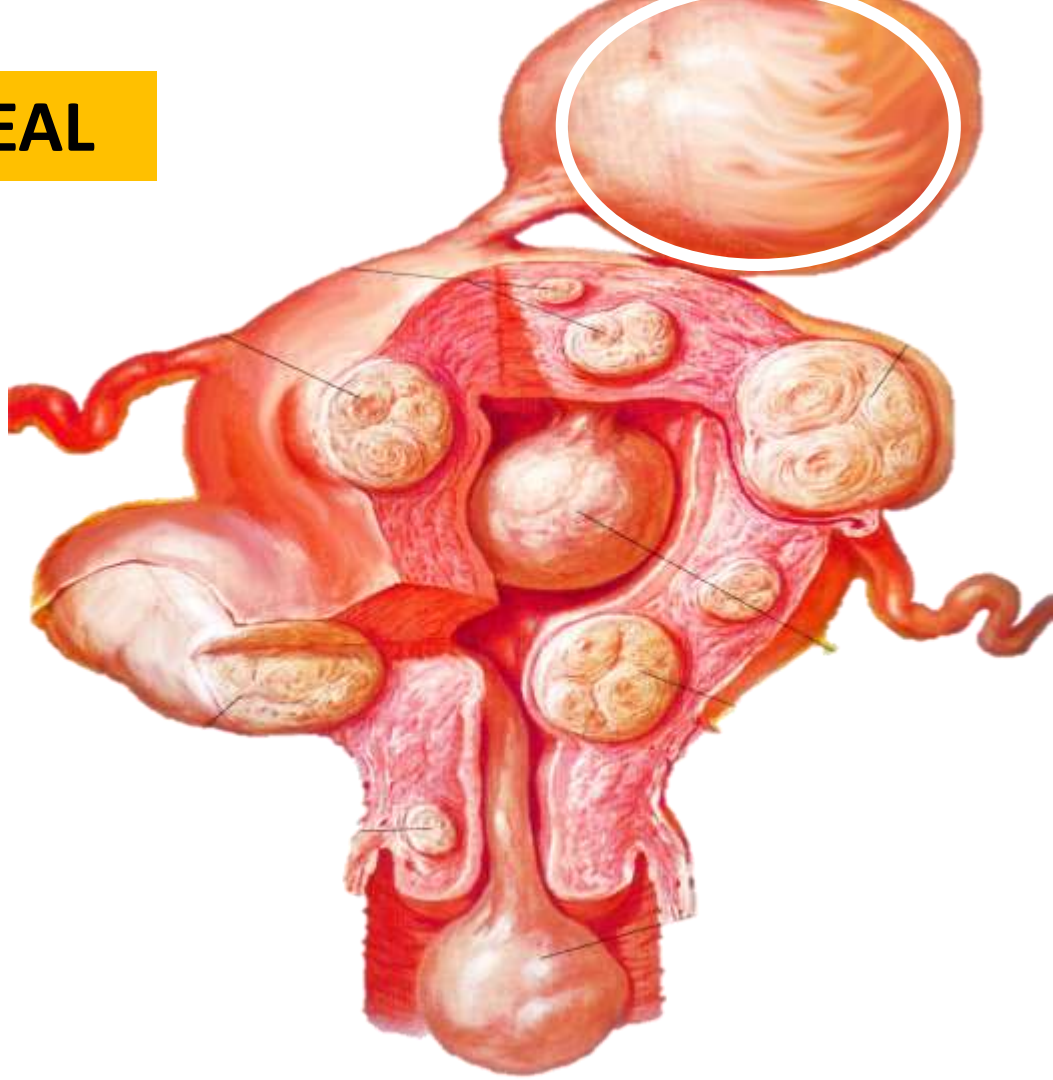
Intramural fibroid is pushed outwards towards the peritoneal cavity



SUBSEROSAL/SUBPERITONEAL

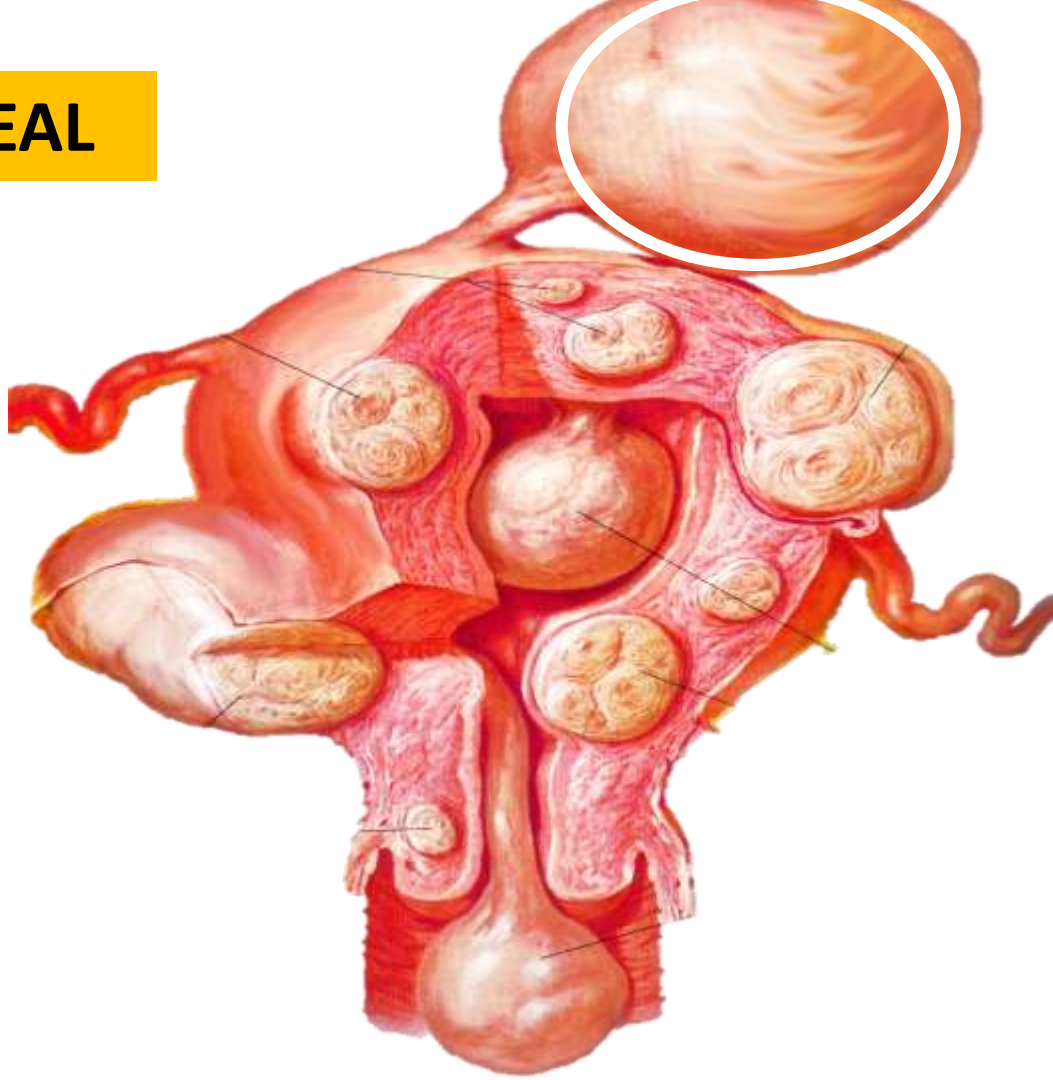
When it completely covered by peritoneum, it usually attains a pedicle –

“pedunculated subserosal fibroid”



SUBSEROSAL/SUBPERITONEAL

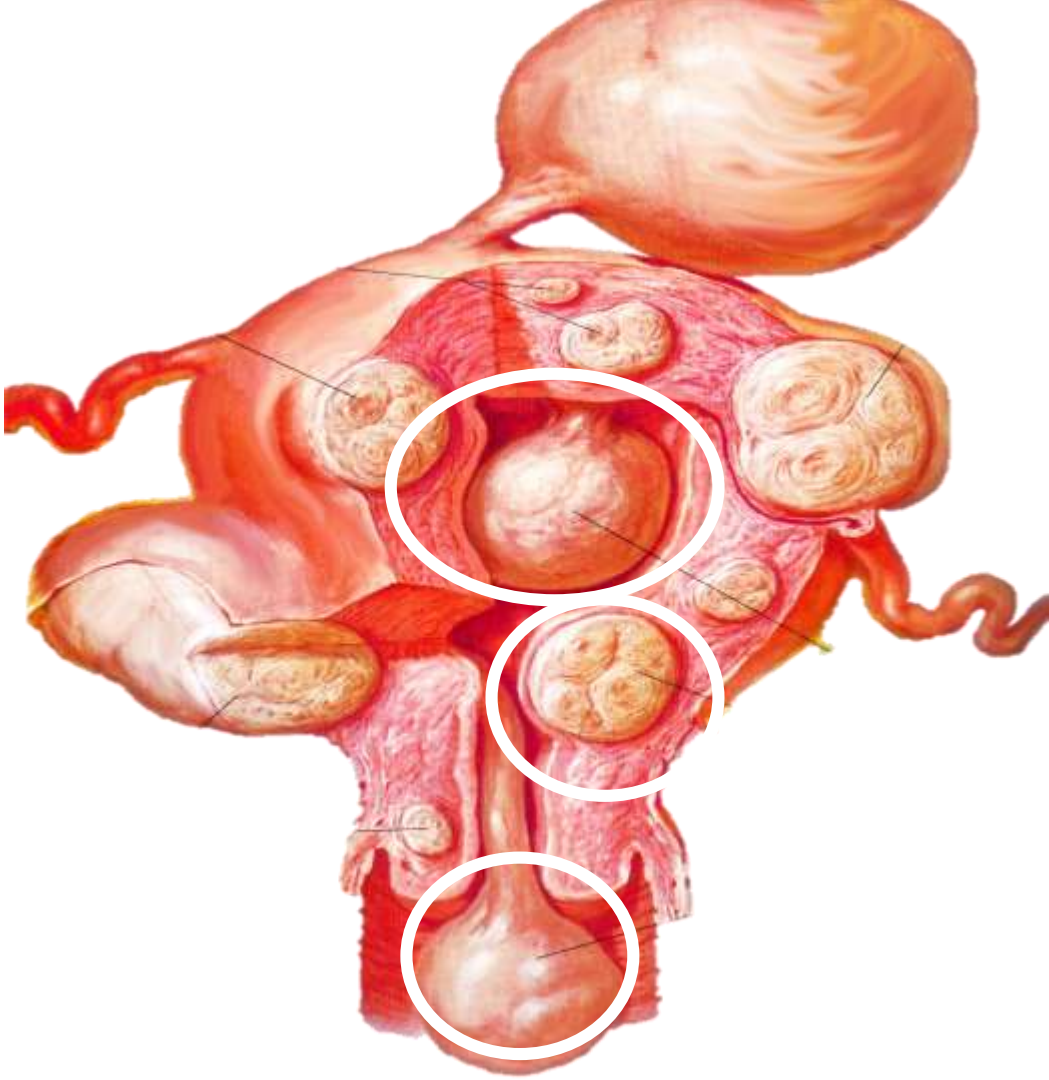
On rare occasion, the pedicle may be torn; the fibroid gets its nourishment from the omental or mesenteric adhesions – "**wandering/parasitic fibroid**"



SUBMUCOSAL

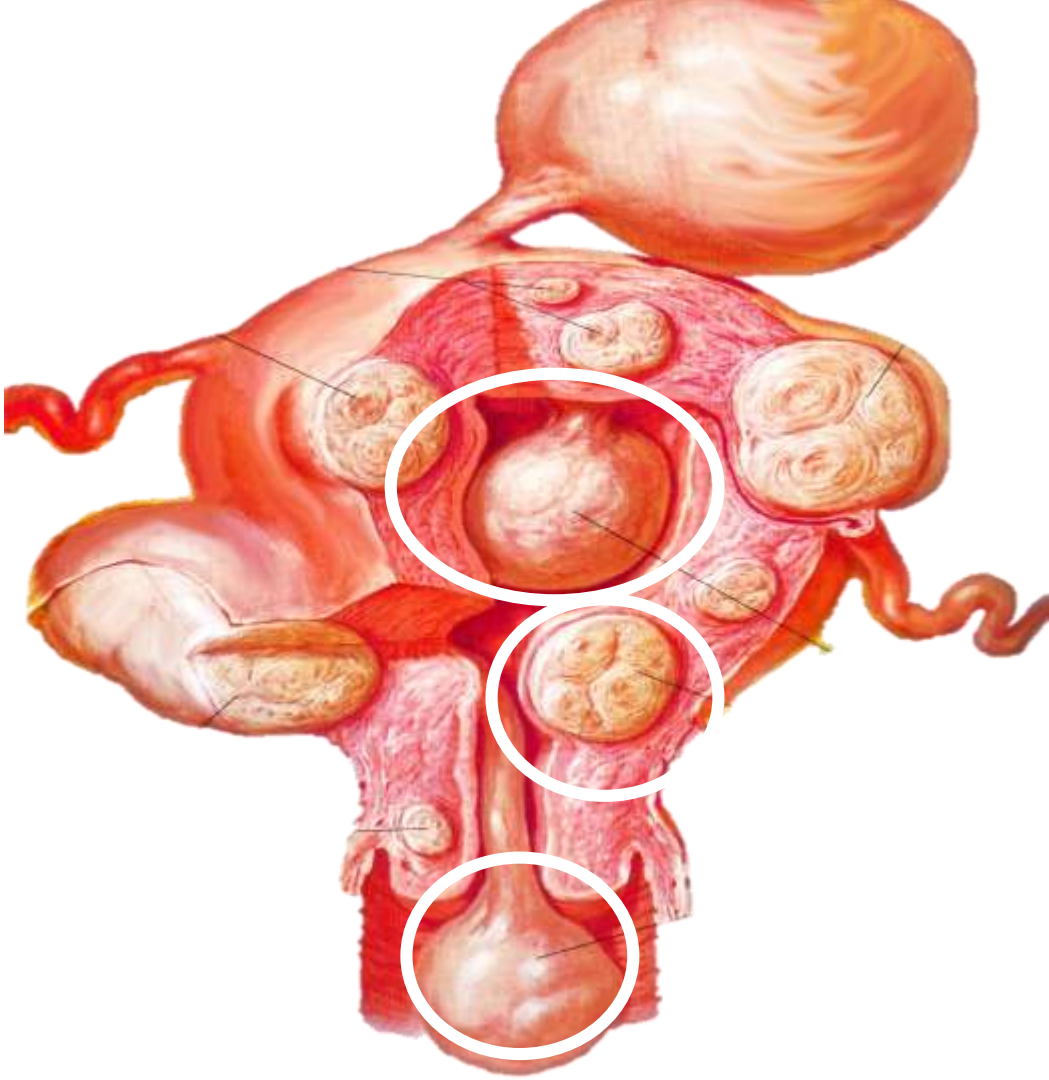
Intramural fibroid, when pushed toward the uterine cavity and is lying **under the endometrium**

Can make the uterine cavity IRREGULAR & DISTORTED



SUBMUCOSAL

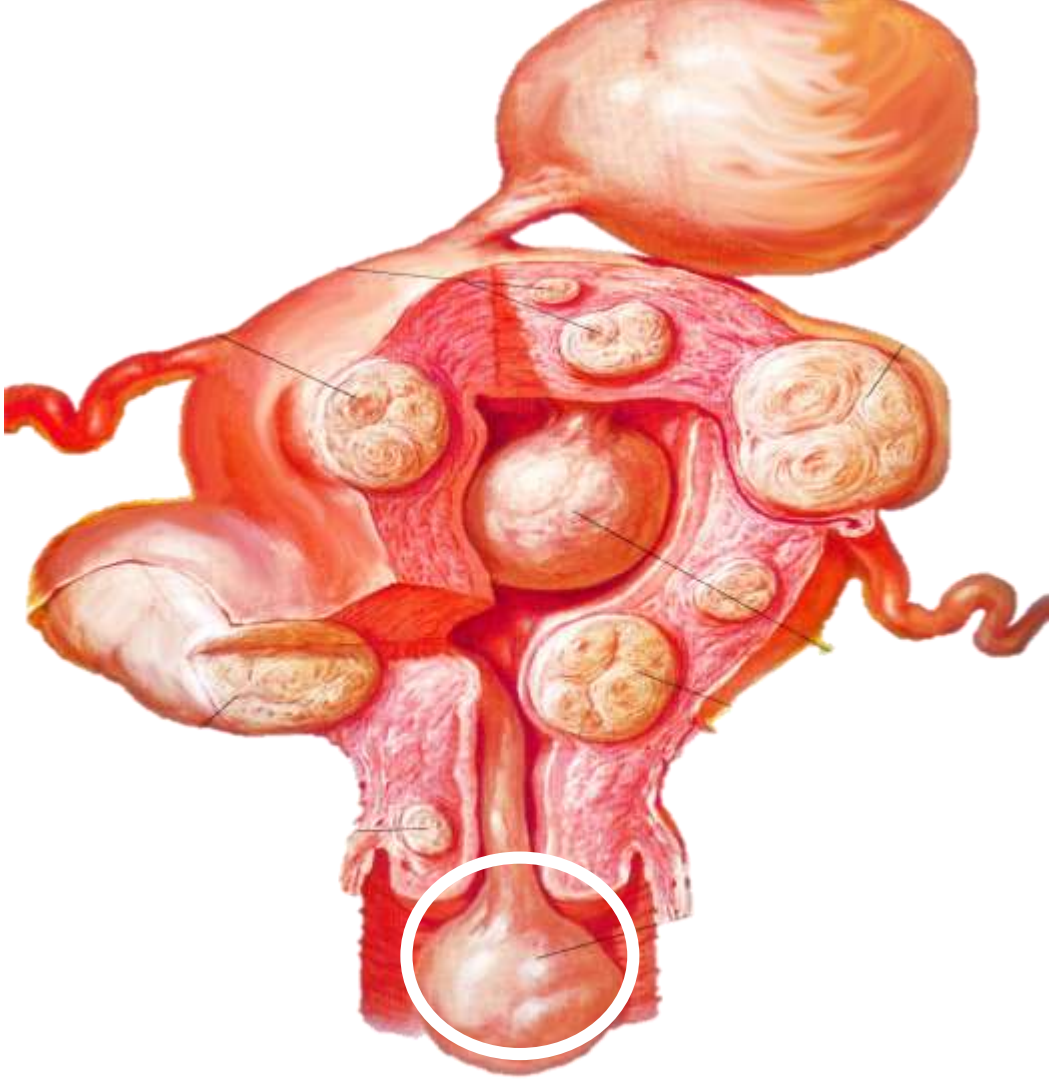
Least common
but
MAXIMUM symptoms



SUBMUCOSAL

Pedunculated submucosal fibroid may come out through the cervix

May be infected/ulcerated to cause METRORRHAGIA

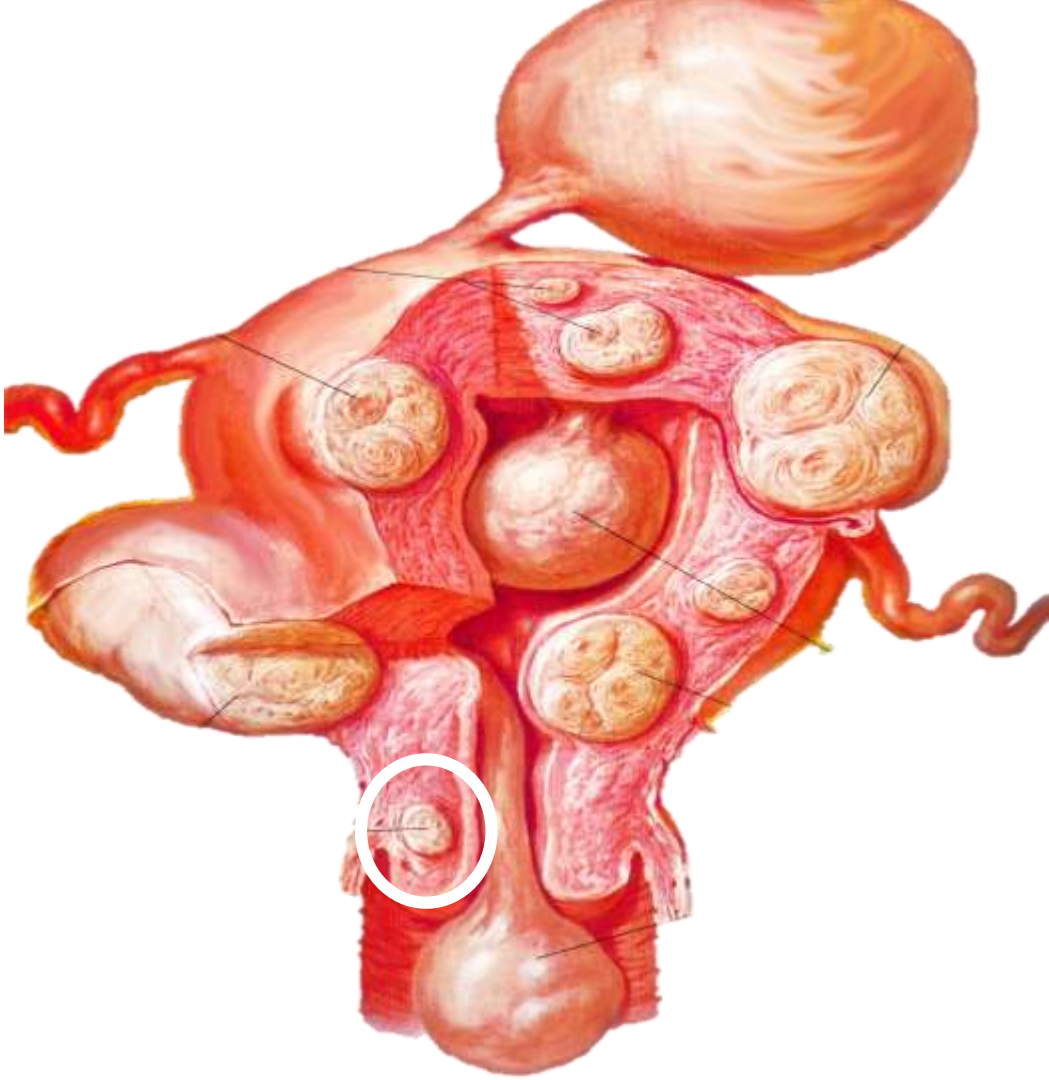


CERVICAL

Rare (1-2%)

May be anterior, posterior, lateral or central

May displace the cervix or expand it so much that the external os is difficult to recognize



SECONDARY CHANGES IN FIBROIDS

- **D**egenerations
- **A**trophy
- **N**ecrosis
- **I**nfection
- **Va**scular changes
- **S**arcomatous changes

DANIVaS

- **Degenerations:**
  - Hyaline degeneration
  - Cystic degeneration
  - Fatty degeneration
  - Calcific degeneration
  - Red degeneration

- **Atrophy:** due to loss of support from estrogen
  - following menopause
  - Following pregnancy enlargement

- **Necrosis:** due to circulatory inadequacy (central necrosis of the tumor)
  - Pedunculated subserous fibroid

- **Infection:** access through the thinned and sloughed surface epithelium of the submucous fibroid.
  - Following delivery or abortion
  - Intramural fibroid may also be infected following delivery.

- **Vascular changes:** Telangiectasis (dilatation of the vessels) or lymphangiectasis (dilatation of the lymphatic channels) inside the myoma may occur. Cause is not known.

- **Sarcomatous changes:** may occur in <0.1% cases. The usual type is leiomyosarcoma.

Other Complications

- **Hemorrhage**
  - Intracapsular
  - Ruptured surface vein of subserous fibroid → intraperitoneal
- **Polycythemia**
  - Erythropoietic function by the tumor
  - Altered erythropoietic function of the kidney through ureteric pressure
- **Torsion** of subserous pedunculated fibroid
- **Inversion of uterus**
- **Endometrial carcinoma** associated with fibromyoma
- **Endometrial** and **myohyperplasia**
- Accompanying **adenomyosis**
- **Parasitic fibroid**

Symptoms

- Menstrual disturbances
- Infertility, recurrent abortions
- Pain
- Pressure symptoms
- Abdominal lump
- Vaginal discharge

Symptoms

Menstrual disturbances

- **Menorrhagia**
  - Conspicuous in IM & SM fibroid
  - due to increased vascularity, endometrial hyperplasia & enlarged uterine cavity

- **Metrorrhagia/irregular bleeding**
  - Ulceration of SM fibroid or fibroid polyp
  - Torn vessels from the sloughing base of polyp
  - Associated endometrial carcinoma

Symptoms

Infertility, recurrent abortions

- **Infertility:**
  - Distortion / elongation of uterine cavity → difficult sperm ascent
  - Poor rhythmic uterine contraction during intercourse → impaired sperm transport
  - Menorrhagia and dyspareunia

- **Recurrents abortions:**
  - Defective implantation
  - Poorly developed endometrium
  - Reduced space for the fetal growth

Symptoms

Pain

- **Usually painless**
- **Pain may be due to some complications of the tumor / associated pelvic pathology**
- **<u>Due to tumor:</u>**
  - Degeneration
  - Torsion
  - Extrusion of polyp
- **<u>Associated pathology:</u>**
  - Endometriosis
  - PID

Symptoms

Pressure symptoms

- **Bladder** → **frequency and retention of urine**
- **Ureter** → **hydroureter & hydronephrosis** (in broad ligament fibroids)
- **Rectum** → **constipation** (rare)

Symptoms

Abdominal lump

- **Heaviness in the lower abdomen**
- A pedunculated fibroid feels separate from the uterus and gives impression of ovarian tumor

Symptoms

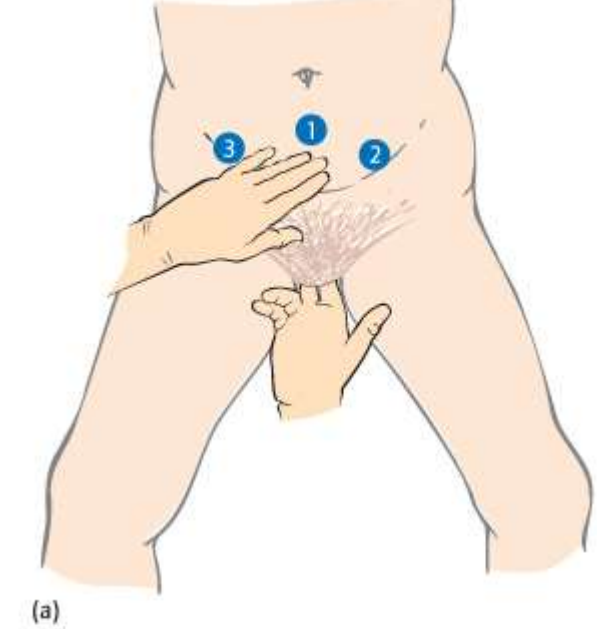
Vaginal discharge

- Rare
- Often blood-stained

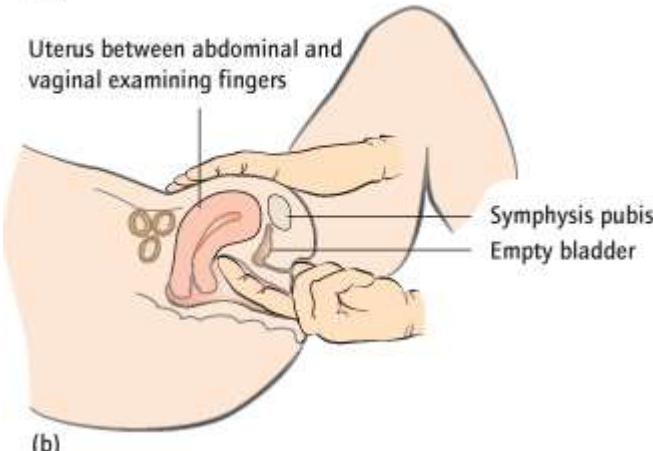
Physical signs

- Anemia
- Abdominal lump
  - Arising from pelvis
  - **Well-defined** margins
  - **Firm** in consistency
  - **Smooth**/bossy surface
  - **Mobile** from side to side unless fixed by large size or adhesions

- **Bimanual examination:**
  - Enlarged uterus
  - Cervix moves with the swelling which is not felt separate from uterus unless it is pedunculated
  - In cervical fibroid, the normal uterus is perched on top of the tumor
  - Broad ligament fibroid displaces the uterus to the opposite side



(a)



(b)

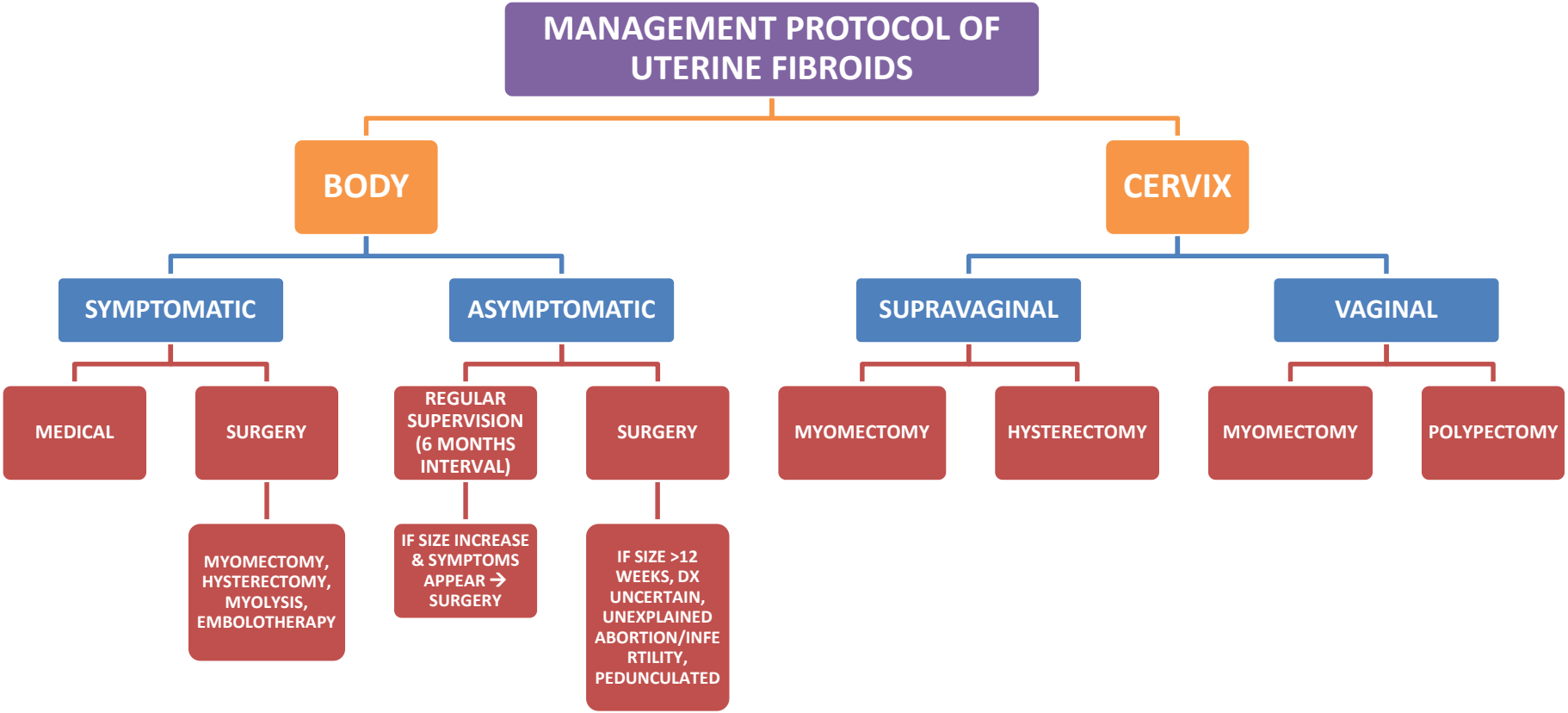
Differential diagnosis ?

- Pregnancy
- Full bladder
- Haematometra/ pyometra
- Adenomyosis
- Bicornuate uterus
- Ectopic pregnancy
- Chronic PID
- Benign/malignant ovarian tumor

Investigations

- **Haemoglobin**, **blood grouping**
- **Ultrasound** abdomen & pelvis
- **Hysterosalphingography** (to identify submucous myoma)
- **Hysteroscopy**
- **D&C** (to rule out endometrial cancer)
- **Laparoscopy**
- **MRI** (to identify adenomyosis and myoma)

In majority cases, the clinical features are clear cut. Elaborate investigations are not required.

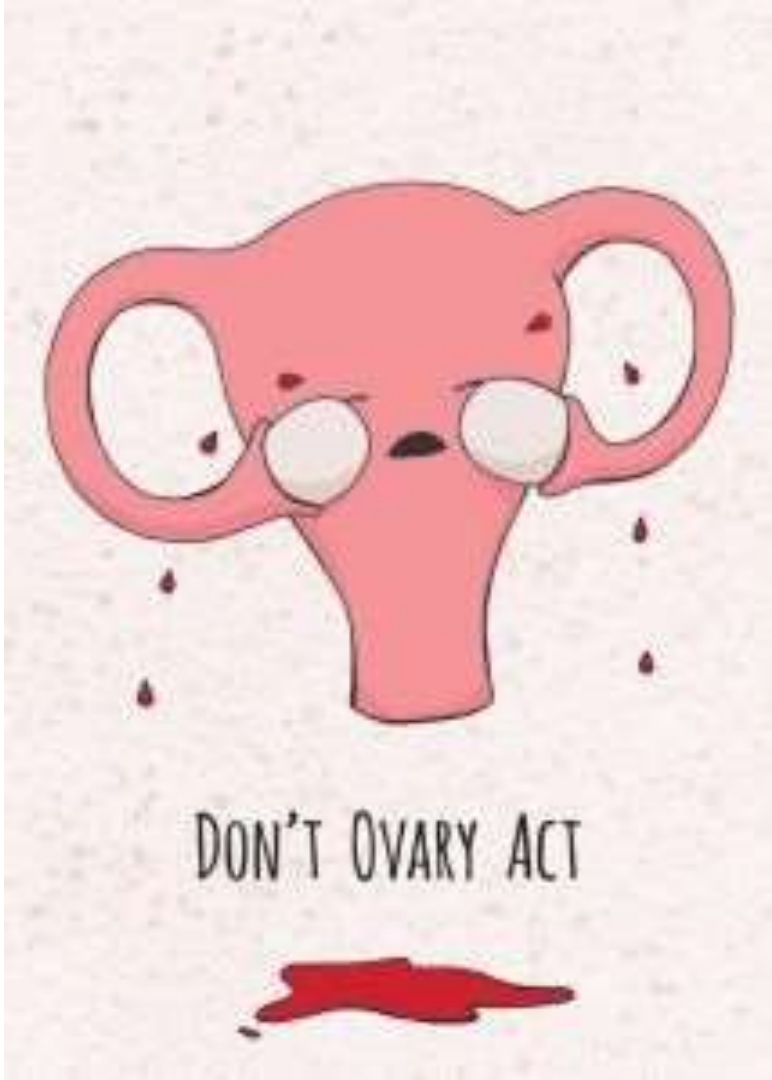

MANAGEMENT PROTOCOL OF UTERINE FIBROIDS
BODY
CERVIX
SYMPTOMATIC
ASYMPTOMATIC
SUPRAVAGINAL
VAGINAL
MEDICAL
SURGERY
REGULAR SUPERVISION (6 MONTHS INTERVAL)
SURGERY
MYOMECTOMY
HYSTERECTOMY
MYOMECTOMY
POLYPECTOMY
MYOMECTOMY, HYSTERECTOMY, MYOLYSIS, EMBOLOTHERAPY
IF SIZE INCREASE & SYMPTOMS APPEAR → SURGERY
IF SIZE >12 WEEKS, DX UNCERTAIN, UNEXPLAINED ABORTION/INFERTILITY, PEDUNCULATED

MEDICAL MANAGEMENT

- ✓ To improve menorrhagia and to correct anemia before surgery
- ✓ To minimize the size and vascularity of the tumor in order to facilitate surgery
- ✓ As an alternative to surgery in postmenopausal women or women with high-risk for surgery
- ✓ Where postponement of surgery is planned temporarily

To minimize blood loss

- **Antiprogesterones**
  - Mifepristone (daily dose of 25-30mg for 3mo)
- **Danazol**
  - 200-400mg divided dose for 3mo
- **GnRH analogs**
  - Agonists (luporelin, goserelin, buserelin, nafarelin)
  - Antagonists (cetrorelix, ganirelix)
- **PG synthetase inhibitor - to relieve pain**



Levonogestrel-releasing intrauterine system
(LNG-IUS)

→ **Reduce the size** and **vascularity** of the fibroid

Fibroids complicating pregnancy

Pregnancy generally cause an **increase in the size** of the fibroids

- Increase vascularity
- High tendency to undergo degenerative changes

Red degeneration

result of the softening of the surrounding supportive tissue

capillaries tend to rupture

blood effuses out into the myoma

(diffuse reddish discolouration)

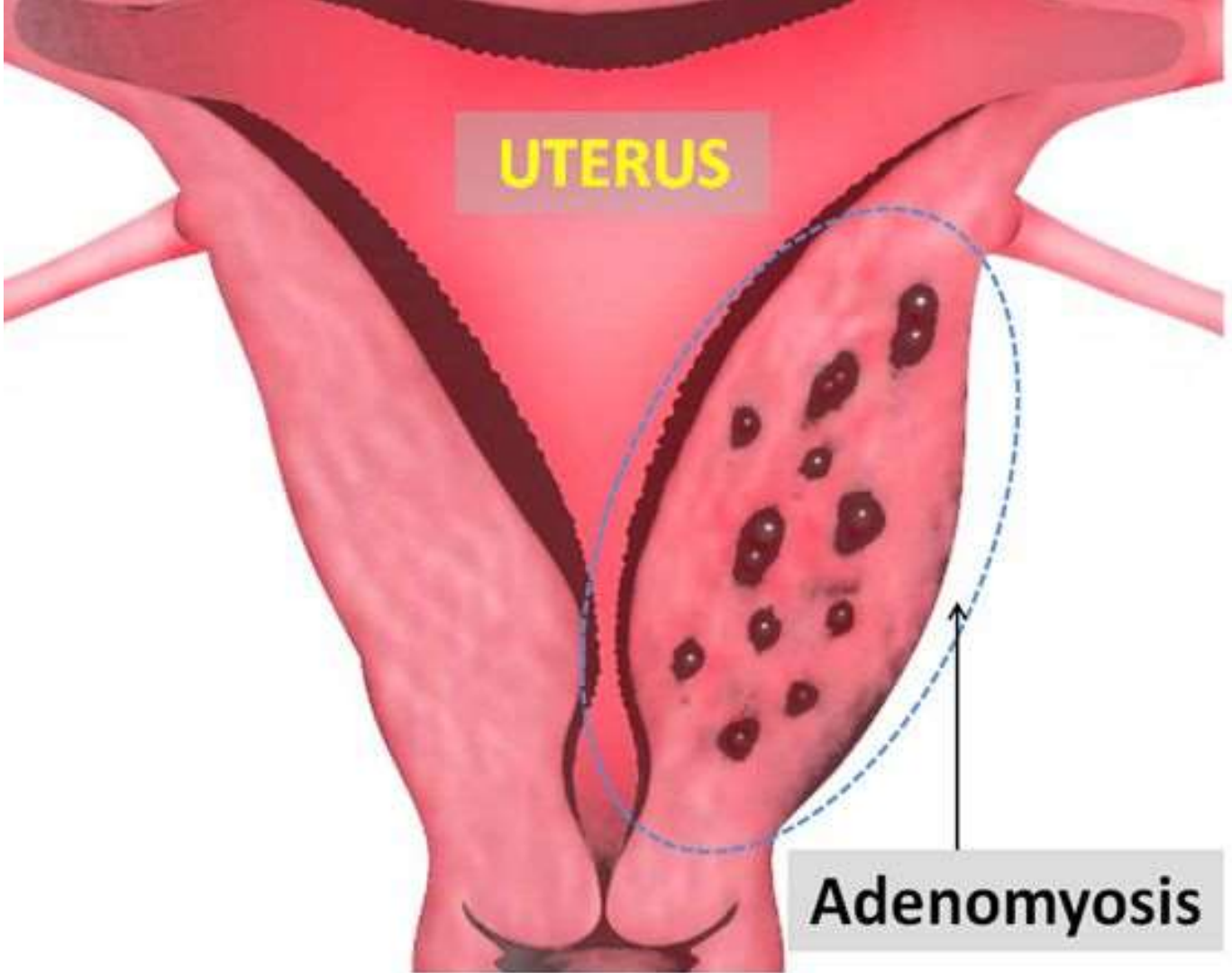
severe acute abdominal pain

(restricted to the site of fibroid uterus)

ADENOMYOSIS

Common condition in which **islands of endometrium are found in the wall of the uterus**

“UTERINE ENDOMETRIOSIS”


UTERUS
Adenomyosis

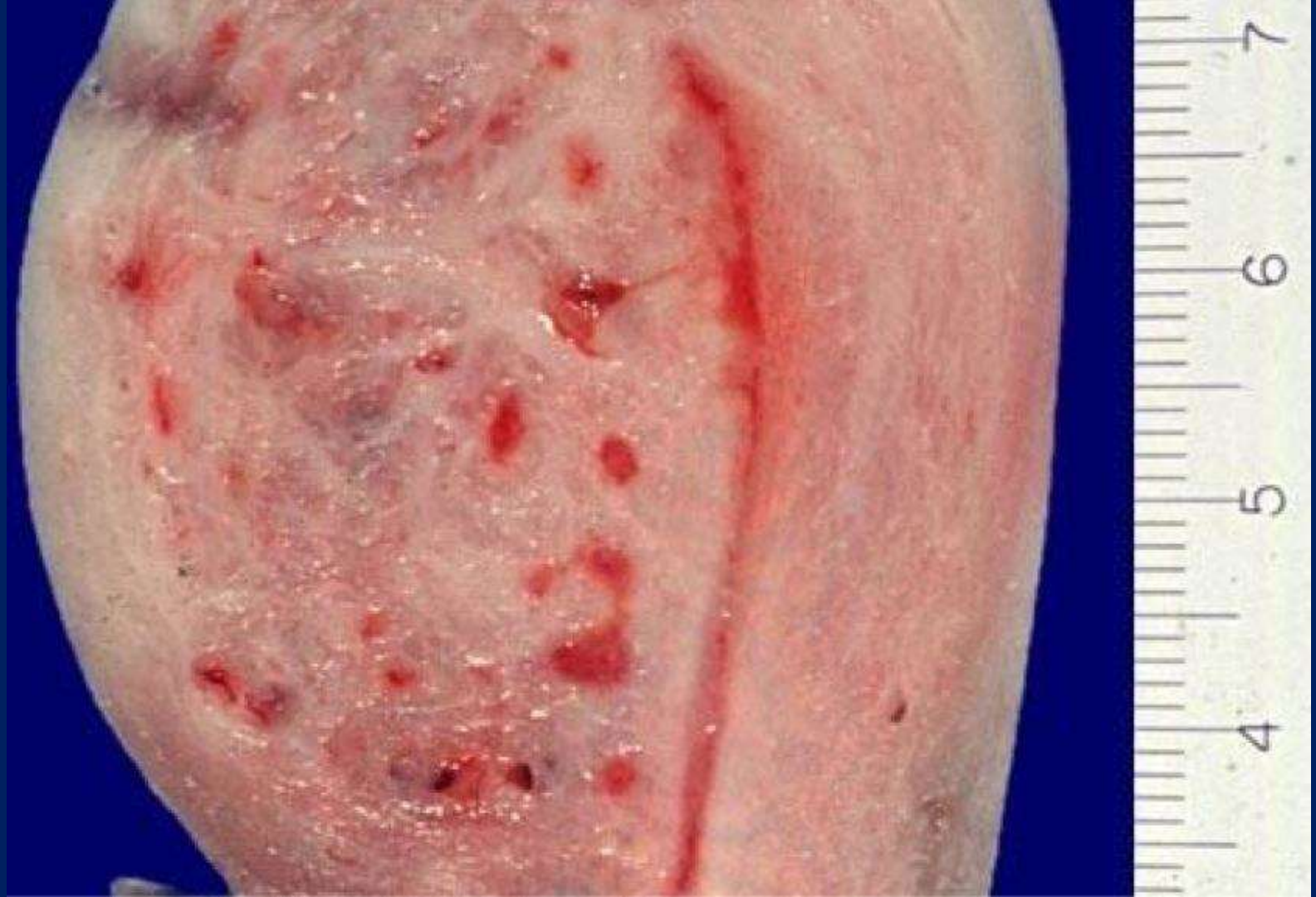
- Observed frequently in **elderly women**
- Women are **usually parous**
- Around the age of **40 years**
- The disease often coexists with uterine fibromyomas, pelvic endometriosis (15%) and endometrial carcinoma

Gross examination

- Uterus appears symmetrically **enlarged to not more than 14-weeks size**

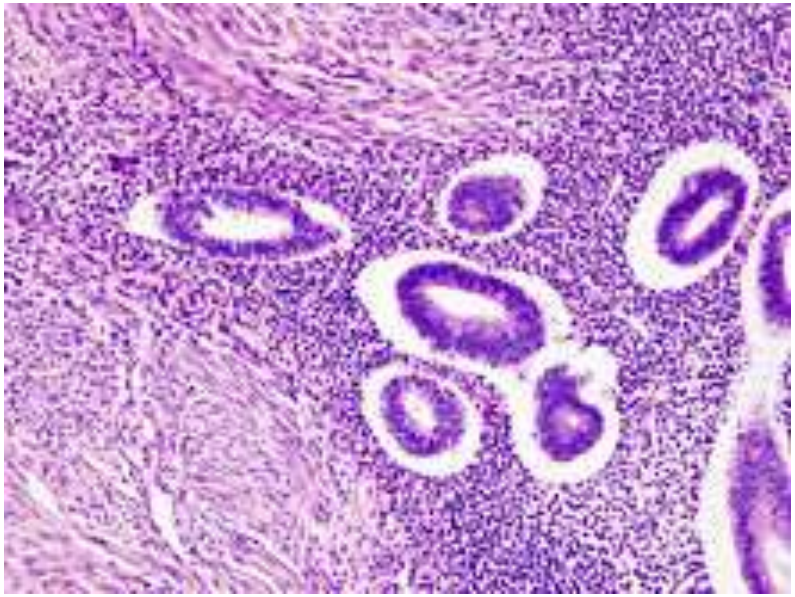
- Cut section may show only a **localized nodular enlargement**

- Affected area reveals a peculiar, diffuse, striated and **non-capsulated** involvement of the myometrium, with **tiny dark hemorrhagic areas** interspersed between


7
6
5
4

Histological examination

- Islands of endometrial glands surrounded by stroma, in the midst of endometrial tissue beyond the myometrial junction



Symptoms

- Menorrhagia
- Progressively increasing dysmenorrhea
- Pelvic discomfort
- Backache
- Dyspareunia

Clinical examinations

- Symmetrical enlargement of the uterus (if adenomyosis is diffused)
- Tender uterus
- Uterine enlargement – rarely exceeds that of 3 months' pregnancy

Differential diagnosis

- A localised adenomyosis → asymmetrical enlargement of uterus – resembles myoma

- A myoma of this size is rarely painful

- Therefore, **menorrhagia**, with **painful**, **assymmetrical** enlargement of the uterus suggests **adenomyosis**

Investigations

- Pelvic ultrasound
- MRI

Medical Treatment

- Non-steroidal anti-inflammatory drugs (NSAIDs)
- Hormonal therapy
- Danazol
- GnRH
- Mirena IUCD

} For menorrhagia and pain

Treatment

- **Diagnostic hysteroscopy + D&C**
  - Initial step in the management of adenomyosis because of menorrhagia
- **Total hysterectomy** (elderly women who passed the age of childbearing)
- **Localized excision**
  - Younger women with localized adenomyosis
  - Anxious to have a child
- **Transcervical resection of endometrium (TCRE)**
  - Effective for about 2 years

That’s all!


Thank
You