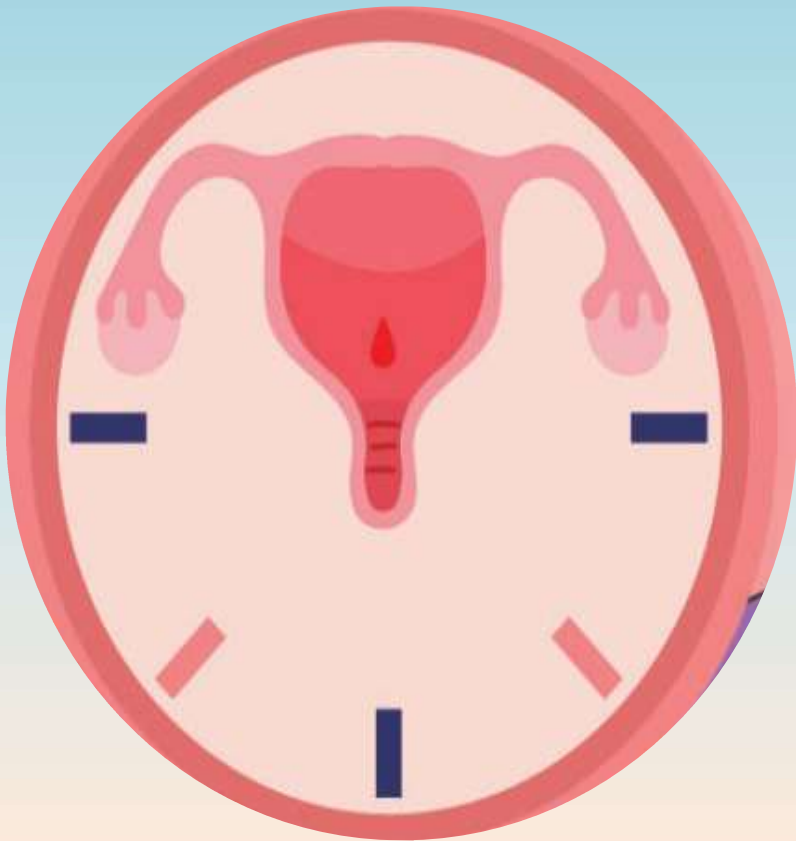


Postmenopausal bleeding



**Dr. Zainab Abdul Ameer
2026**

Postmenopausal bleeding

definition

- ❑ Bleeding per vagina following established menopause (after 12 months of amenorrhea)
- ❑ **NOTE=Menstruation after 55years is abnormal and should be investigated .**

- It affects as 30% of postmenopausal women.
- In women not taking HRT, any bleeding is abnormal.
- In women on combined cyclical HRT, bleeding in progesterone - free period is normal.
- Unscheduled bleeding is abnormal and should be investigated.
- Approximately(one-third) of the cases due to malignancy

Risk factors for endometrial cancer:

- 1. Early menarche /Late menopause.**
- 2. Obesity(elevated BMI)**
- 3. Nulliparity.**
- 4. Unopposed estrogen exposure /Chronic anovulation(PCOS) /use of Tamoxifen (for breast cancer)**
- 5. Diabetes mellitus / hypertension / metabolic syndrome**
- 6. Family history of endometrial, ovarian, breast, colon cancer(Lynch Syndrome)**

**What are the differential
diagnosis (etiology) of
postmenopausal bleeding?**

Etiology

- 1. atrophic endometritis/vaginitis (60-80%)** (the epithelium thins and breaks down in response to low estrogen levels)
- 2. Hormone Replacement Therapy (HRT)**
15–25% (unscheduled bleeding)
- 3. endometrial or cervical polyp (10%)**
- 4. endometrial hyperplasia (5-10%)**
- 5. Endometrial carcinoma(5–10%)**

OTHER CAUSES

- 1) Benign and malignant neoplasms of the **vulva, vagina, cervix, fallopian tubes**
- 2) **Ovarian tumors: estrogen-producing tumors**(theca cell, granulose cell tumors)

3-Infections

- Vaginitis — Trichomonas, Candida, Chlamydia**
- Senile endometritis**
- tuberculous**

4-Injuries

- 1)Direct trauma**
- 2)Decubital ulceration**
- 3)Foreign bodies such as ring pessaries**
- 4)Post radiation ulceration**

5-over use of anticoagulant medications such as aspirin, heparin, and warfarin.

**6-Abnormalities of the
hematologic system e.g. leukemia
or a blood dyscrasia.**

**7-Bleeding from the urethra, bladder
and rectum (mistaken for vaginal
bleeding)**

1)Urethral caruncle

**2)Papilloma and carcinoma of the
bladder**

3)Hemorrhoids and fissure-in-ano

4)Carcinoma of the rectum



History



A detailed history

1. Parity

2. Confirm menopausal, when was your last period? age of menopause?

3. Bleeding history:

- **when did the bleeding start?**
- **Frequency**
- **Duration**
- **Severity of the bleeding (spotting, light, heavy, presence of clots)**
- **whether it was related to trauma, including intercourse (Post-coital bleeding)?**

4. Associated symptoms such as :

- ❖ Pain**
- ❖ fever**
- ❖ urinary tract symptoms(dysuria or frequency of urination)**
- ❖ bowel function symptoms**

- 5. When was your last smear done? Result of smear ?**
- 6. Menstrual pattern prior to menopause**
- 7. Sensation of something coming out of the introitus.**

8. Past medical history

- hypothyroidism**
- Diabetes**
- bleeding disorder**
- kidney**
- liver conditions**
- Personal bleeding disorder or easy bruising.**

10-drug history

HRT

estrogens

steroids

tamoxifen

anticoagulant drugs

COCP



11.

.family history of:

- **Lynch type II syndrome (hereditary nonpolyposis colorectal**
- **ovarian cancer**
- **Endometrial cancer**
- **family history of bleeding disorder**

Physical exam:



- **General examination: for** :to look for sign of systemic illness.
- BMI
- Pallor
- Cachexia
- thyroid gland assessment
- palpated lymph nodes: groin or supraclavicular lymph nodes
- Blood pressure

- **The chest examination**

1. **breast** for possible mass

2. **cardiac**

3. **respiratory examination for possible metastasis.**

❖ Abdominal examinations: for any

1. abdominal masses extending from the pelvic
2. ascites

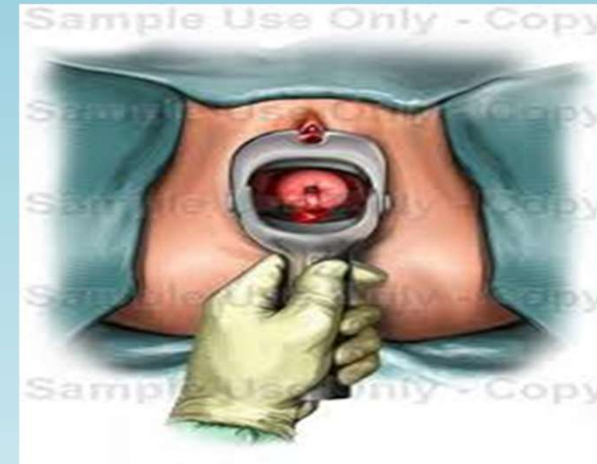


Vaginal bleeding

A speculum Examination

look for

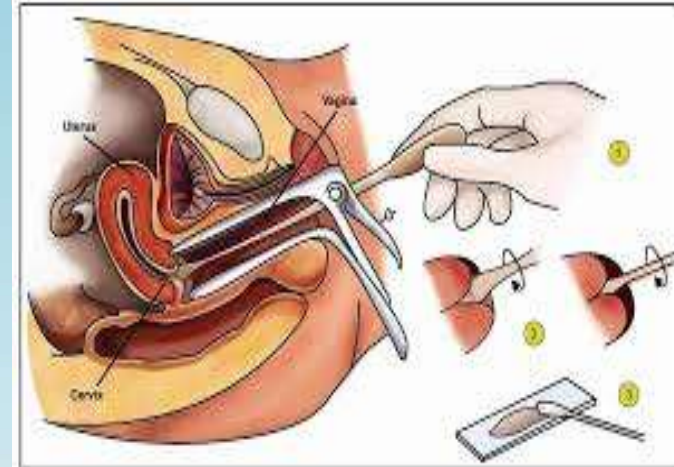
1. the urethral meatus for an Caruncle
2. polyp
3. atrophic changes in the vagina
4. Bleeding spots
5. Ulcers
6. infection
7. Mass or abnormal growth
8. Prolapse.



A speculum Examination

Then before removal of the speculum A Pap smear is taken.

if indicated Colposcopy with biopsy for suspected area



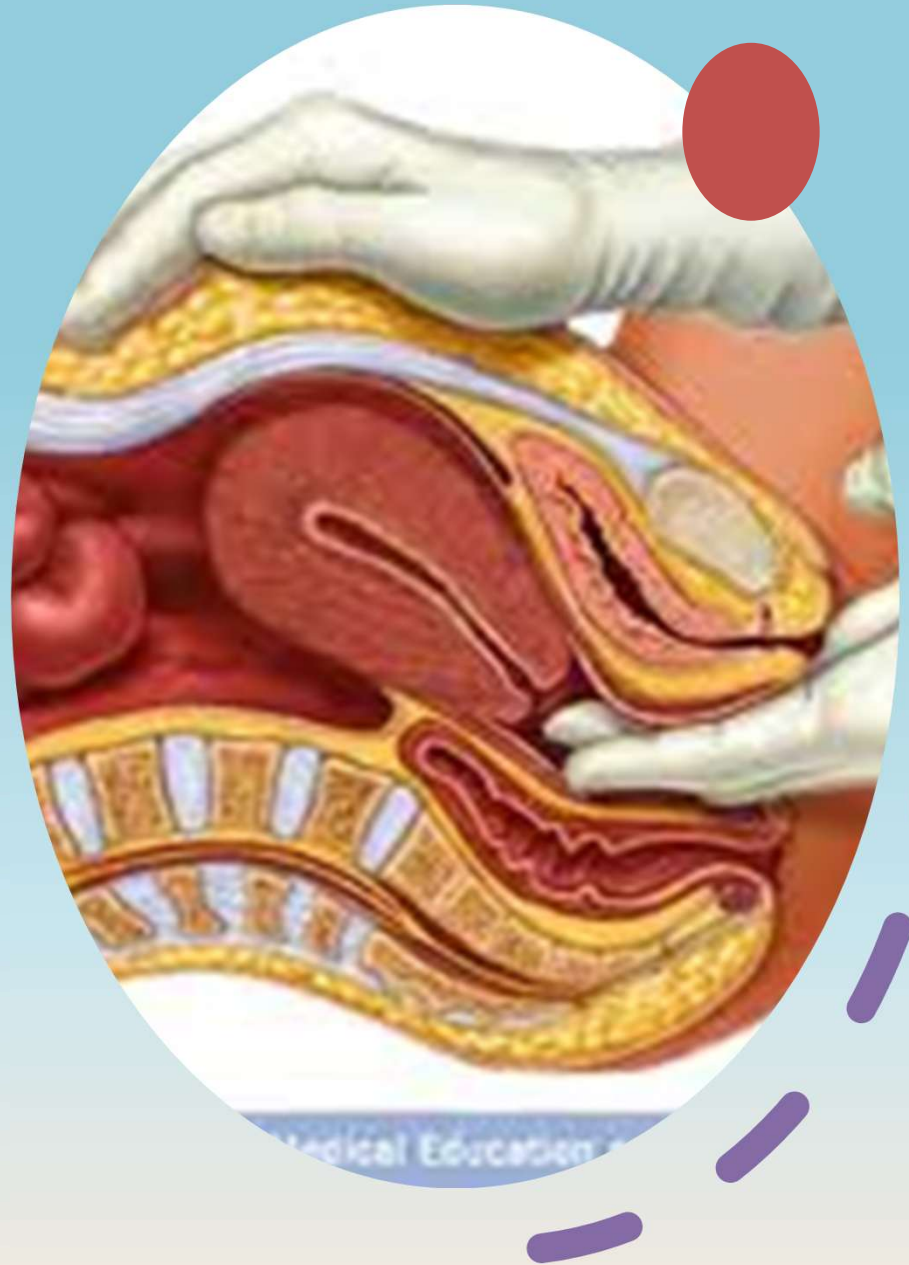
Vaginal bleeding

A bimanual examination

I. Assess the uterus for

- ❖ size, atrophic or enlarged
- ❖ Contour
- ❖ Position
- ❖ tenderness of the uterus
- ❖ Mobility (fixed or not)

II. Palpable adnexal mass



A digital rectal examination (PR):

➤ **To assess if per rectum (PR) bleeding mistaken as PMB**

***All postmenopausal
bleeding is suspected
endometrial carcinoma until
proven otherwise.***

Investigations:

❖ **General investigation to assess fitness of patient and wellbeing**

- 1. Complete blood count (CBC) , platelet count***
- 2. Coagulation profile***
- 3. blood sugar (fasting and postprandial)***
- 4. RFT***
- 5. GUE***
- 6. chest x-ray***
- 7. ECG***

Investigations:

Transvaginal sonography (TVS) should be done to measure endometrial thickness (ET) and assess its pattern (homogeneous or focal).

1/ if Endometrial Thickness < 4 mm

- Endometrial carcinoma is very unlikely (<1%).
- No further endometrial assessment is required.

❖ Management:

- 1. Reassure the patient.**
- 2. Review after 3 months or earlier if bleeding recure**



Figure 2. Thin endometrium on transvaginal sonography in a woman with postmenopausal bleeding: endometrial thickness = 3.5 mm

Case example :

A 62-year-old woman on tamoxifen for breast cancer presents with light vaginal bleeding.

TVUS shows endometrial stripe 3 mm.

Next step:

 Endometrial biopsy

Explanation:

Even with thin endometrium, risk factors (tamoxifen) justify sampling.

Case example :

A 54-year-old woman with single episode of PMB, ET 3 mm, no risk factors.

Next step:

 Reassurance and observation

Explanation:

If ET \leq 4 mm and no risk factors \rightarrow cancer risk $<$ 1%; biopsy not immediately needed.

**2/Endometrial Thickness
≥ 4 mm (Homogeneous)**

**Endometrial sampling is
indicated.**



Figure 1. Thickened endometrium on transvaginal sonography in a woman with postmenopausal bleeding: endometrial thickness = 19.2 mm

3/Focal Endometrial Thickening ≥ 5 mm

Suggests localized pathology (e.g., polyp, submucous fibroid, focal carcinoma).

Next step: Hysteroscopy with directed biopsy

4/If Endometrium is not clearly identified or appears irregular
proceed to:Sonohysterography (saline infusion ultrasound), or Endometrial biopsy (EMB), or Diagnostic hysteroscopy

2-Endometrial sampling

Indications of Endometrial sampling in general :

A/Ultrasound-Based (Suspicious Sonographic Findings)

- 1. Endometrial thickness > 4 mm in a postmenopausal woman with bleeding.**
- 2. Irregular or heterogeneous endometrial outline**
- 3. Focal endometrial abnormality, such as a polypoid or localized thickening (usually $>9-10$ mm).**
- 4. Endometrial mass**
- 5. Endometrial echo not adequately visualized on TVS (due to obesity, fibroids, or poor definition).**
- 6. Presence of intrauterine fluid, Hematometra or pyometra**

2-Endometrial sampling

Indications of Endometrial sampling in general :

B/Clinical indication

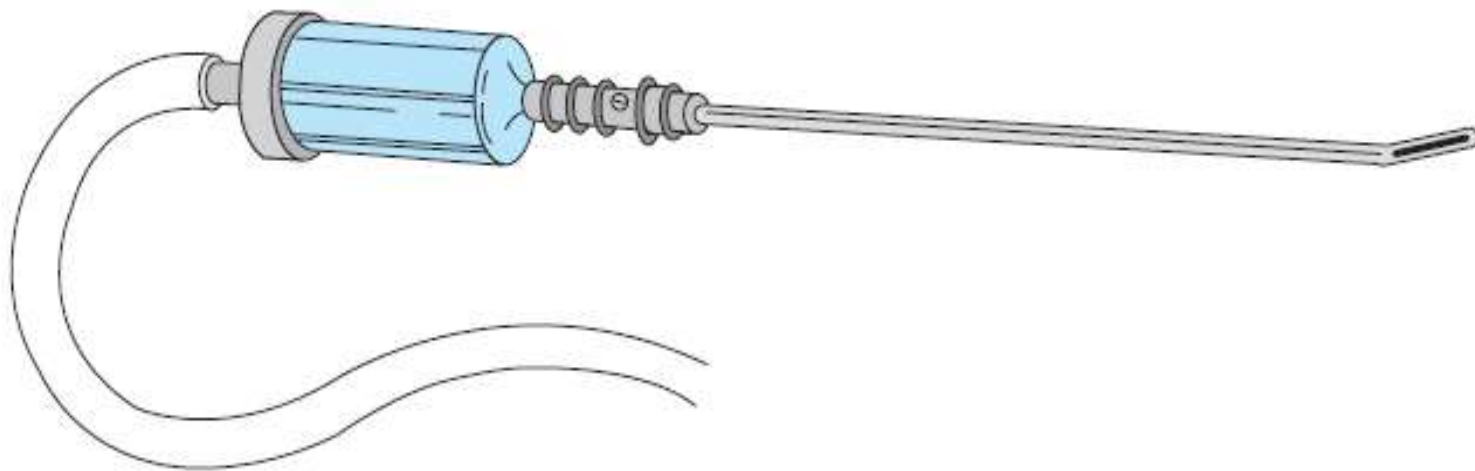
- 1) Persistent postmenopausal bleeding (PMB) despite a thin endometrial stripe.
- 2) Recurrent PMB with previous normal findings.
- 3) advanced age group.
- 4) Non-HRT user
- 5) Obesity.
- 6) Diabetes mellitus.
- 7) Hypertension.
- 8) Use of unopposed estrogen therapy.
- 9) Tamoxifen therapy for breast cancer.
- 10) Family history of endometrial or colorectal cancer (e.g., Lynch syndrome).

Types of Endometrial sampling

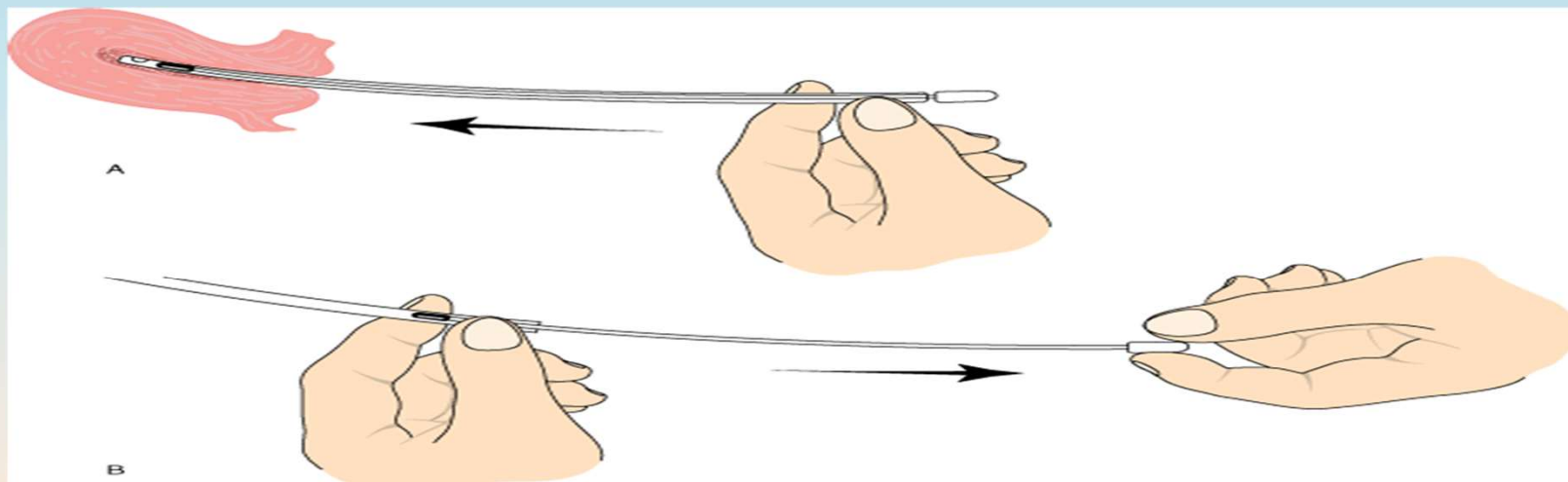
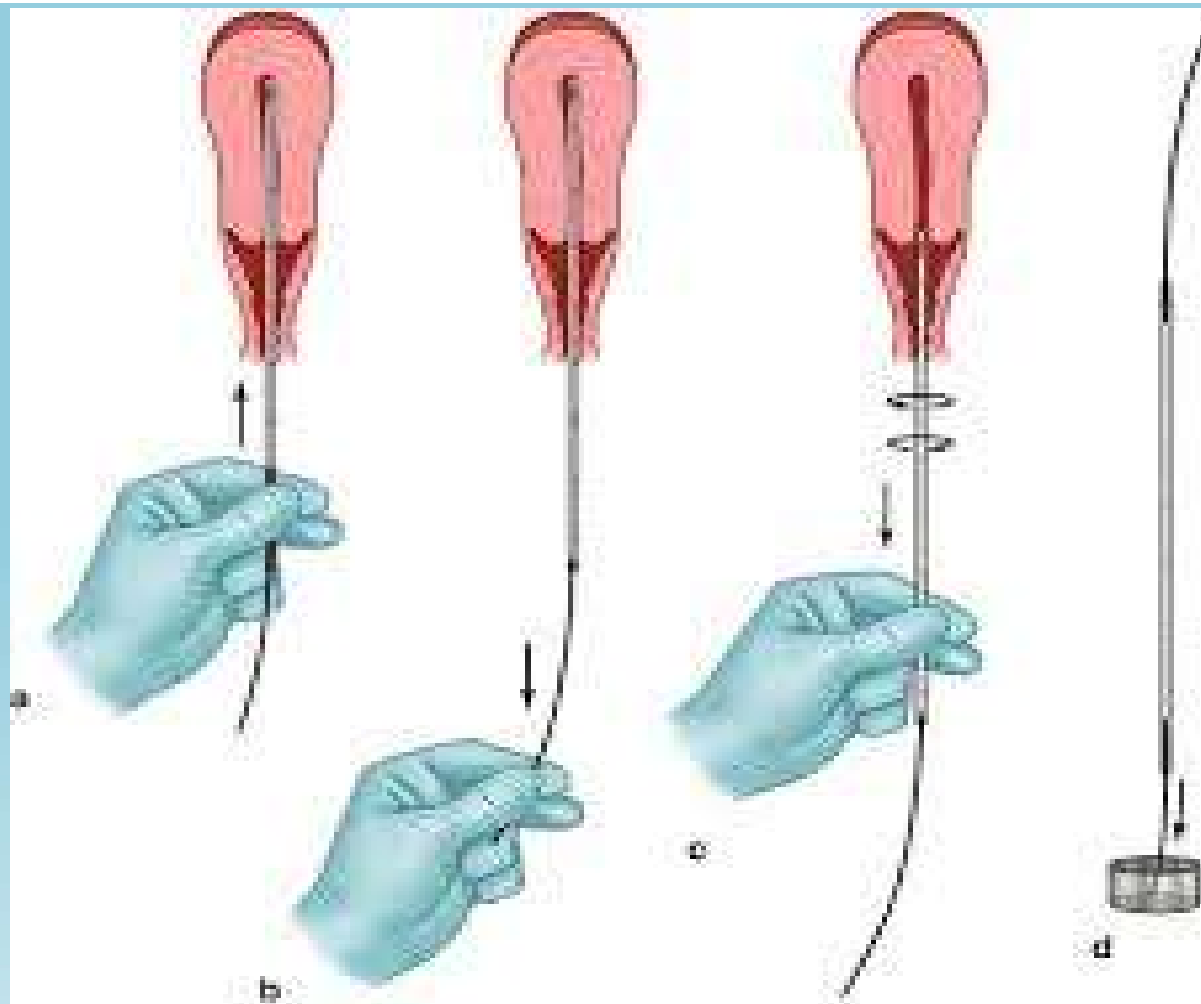
A. Outpatient endometrial biopsy.

- 1. Pipelle*
- 2. Vebra*
- 3. sharman curatte*
- 4. NOVAK*
- 5. KARMAN*
- 6. Outpatient hysteroscopy*

Vabra aspirator.



Pipelle



Indicated of out patient endometrial sampling under GA

- 1. Unsuccessful outpatient sampling, especially if not cooperative patient and in very stenosed cervix that even prevent the out-patient sampling**
- 2. Inadequate sample for interpretation.**
- 3. High suspicion of cancer with negative outpatient biopsy.**
- 4. Any abnormal, non-homogeneous, or poorly visualized endometrial pattern**

Types of Endometrial sampling

B. In patient endometrial biopsy

1) Dilatation & curettage

2) Hysteroscopy directed endometrial biopsy.

Secondary evaluation

- **If endometrial biopsy and /or TVS do not lead to a clinical diagnosis, further evaluation is needed.**

1. Saline infusion sonography (SIS) or sonohysterography,
sterile saline is instilled into the endometrial cavity followed by performance of a TVS.

If Saline infusion sonography shows a focal lesion,
hysteroscopy should be considered.

The disadvantage

no tissue is obtained for histological diagnosis.



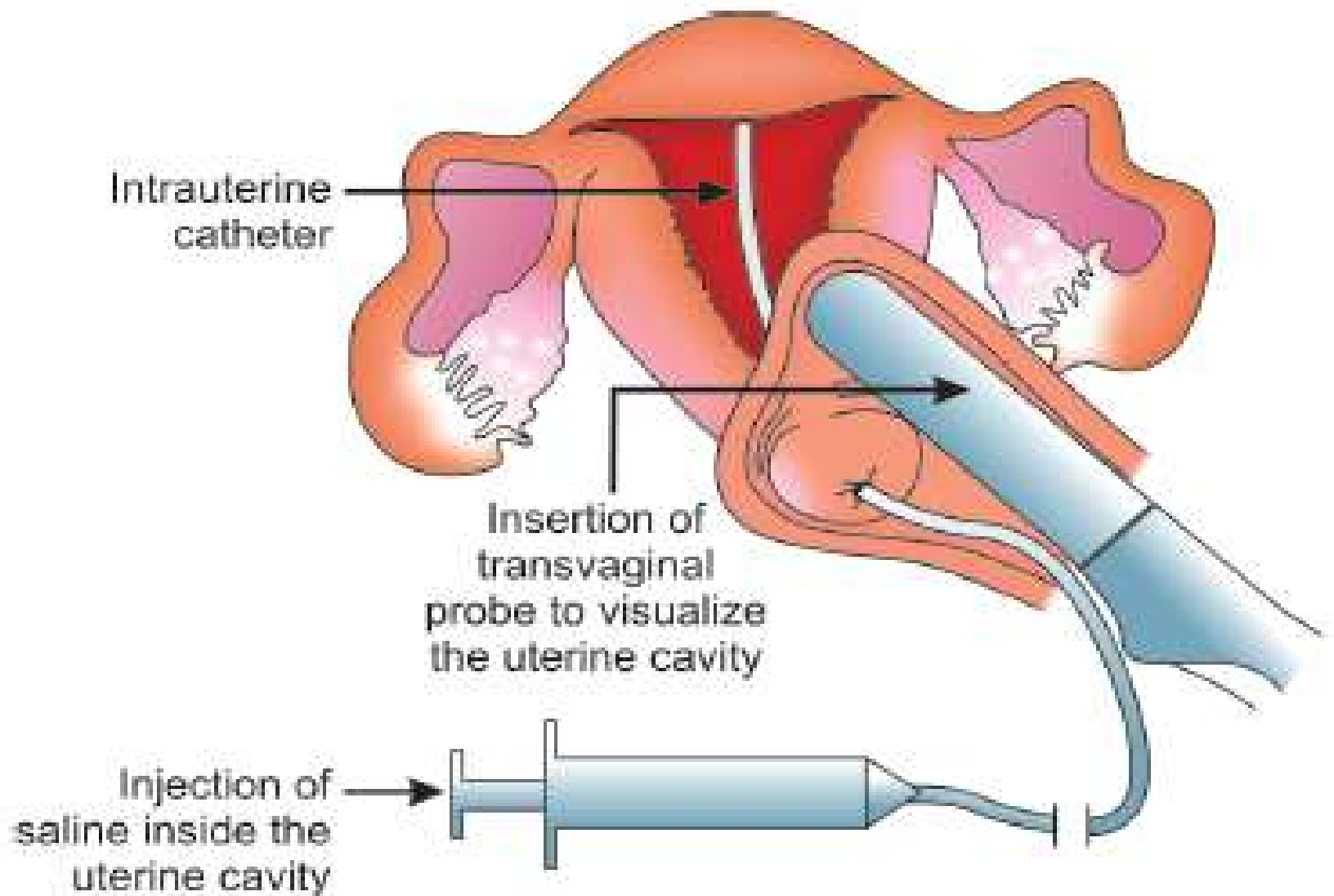


Fig. 17.2: Procedure of doing SIS

2-CT and MRI:to predict myometrial invasion.

3-Laparoscopy: in selected cases

3-if ovarian mass:

tumor markers

Ca-125

LDH

hCG

AFP

CEA

inhibin

estradiol

Treatment

Treatment of postmenopausal bleeding depends on the cause.

Treatment

It depends on the cause

❖ **Atrophic vaginitis:**

topical estrogen

estrogen pessaries or Estrin(estrogen ring pessary).

Premarin cream can stimulate endometrium and should not be used without

progestogenic

apposition for more than 3 months.

- ❖ **Systemic treatment : with**
 1. **hormone replacement therapy (HRT) if the uterus is in situ**
 2. **with estrogen replacement therapy (ERT) if the uterus has been removed**

- ❖ **Cervical polyp:** remove using polyp forceps.
- ❖ **Endometrial polyps** may be removed (**polypectomy**) by :

direct Hysteroscopic resection

or

D&C

❖ **Removal of tissue** from the inside of uterus (**curettage**) may be all that is necessary to relieve postmenopausal bleeding.

5. Simple Endometrial hyperplasia can be treated with progestin therapy or hysterectomy

❖ **Cyclic progestin** may be administered for treatment of **overgrowth of the endometrium (simple endometrial hyperplasia)**, for up to 3 months.

At completion of progestin therapy

- 1. a repeat D&C or endometrial biopsy will be performed to verify absence of hyperplasia**
- 2. Then oral HRT with progestin may be given.**

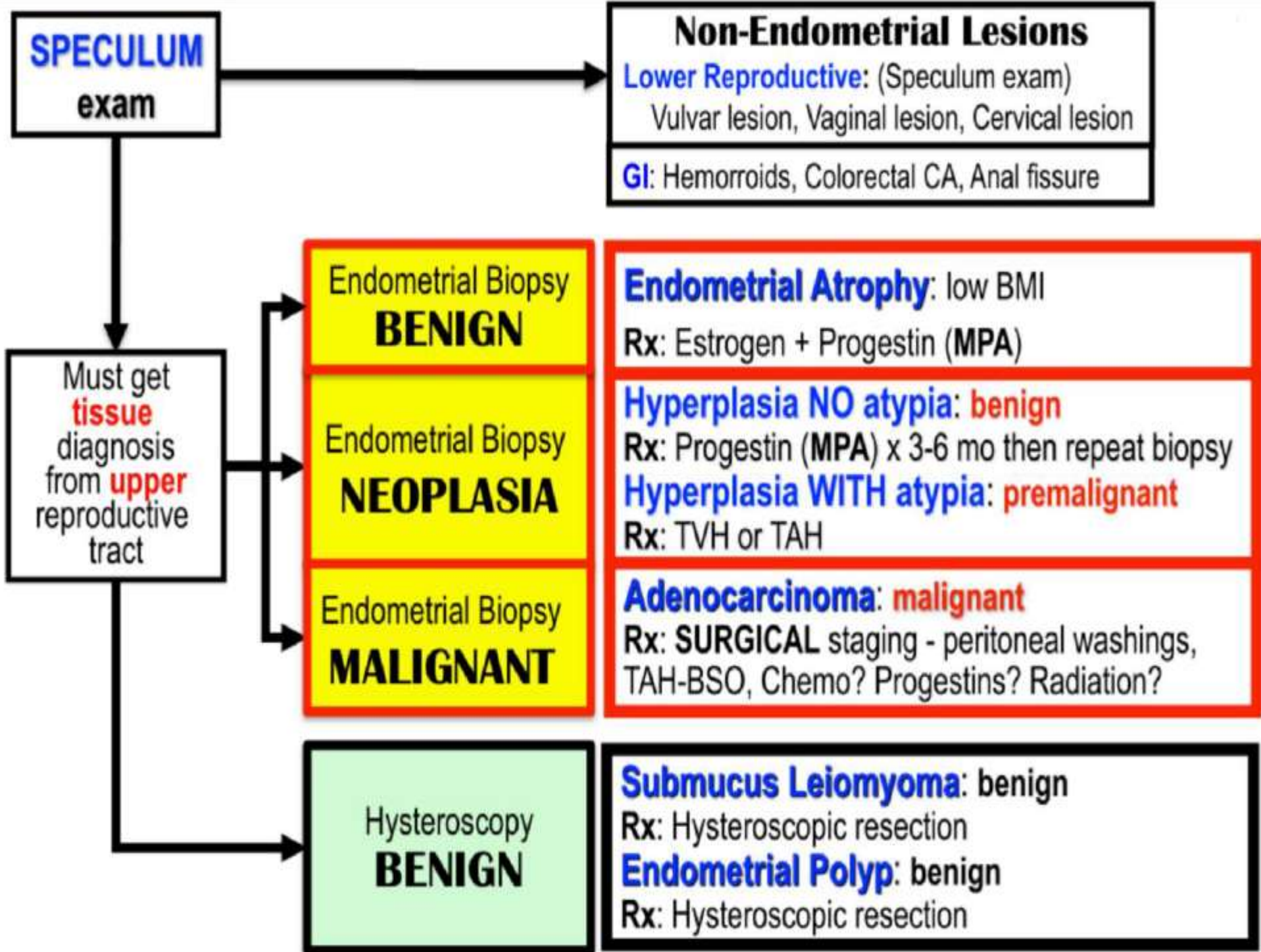
❖ **Atypical hyperplasia:**
total abdominal hysterectomy
as significant risk of progression to
malignancy.

6. endometrial cancer is usually treated by TAHBSO performed in conjunction with possible lymph node dissection, radiation, or chemotherapy (less common).

7.Hysterectomy

may be necessary to treat the following condition.

- 1.Endometrial hyperplasia with atypical cells.**
- 2.Bleeding does not resolve with treatment ,causing anemia due to chronic blood loss.**
- 3.endometrial cancer**
- 4.cervix cancer**



**Asymptomatic Endometrial
Thickening in
Postmenopausal Women**



Postmenopausal women presented for routine investigation incidentally knowing that she has endometrial thickening (9mm) but she asymptomatic, no risk factors for endometrial cancer and there is no any change in the endometrium) What is the next step?

- **Asymptomatic Postmenopausal women**
- **without bleeding**
- **With no risk factors**
- **With no specific abnormal finding in endometrium by doppler study**
- **with endometrial thickening of <11 mm**

do not require invasive investigations



**Postmenopausal women presented for routine investigation incidentally knowing that she has endometrial thickening (9mm) and there are she asymptomatic and has diabetic
What is the next step?**

Indications for endometrial sampling in postmenopausal asymptomatic patient

- 1. woman who has an endometrial thickness >11 mm**
- 2. positive findings on ultrasound, such as increased vascularity, inhomogeneity of the endometrium, or particulate fluid, cystic change ,or irregular shape**
- 3. Has risk factor for endometrial cancer**

Indications for hysterosonogram or diagnostic hysteroscopy or dilation and curettage in asymptomatic postmenopausal women

endometrial thickening >11 mm and insufficient endometrial sampling

Thank you

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- 2. *DC Dutta's Textbook of Obstetrics including Perinatology and Contraception 8th Edition***
- 3. *100 Cases in Obstetrics and Gynaecology***
- 4. *Practical Cases in Obstetrics & Gynecology 2nd Edition***