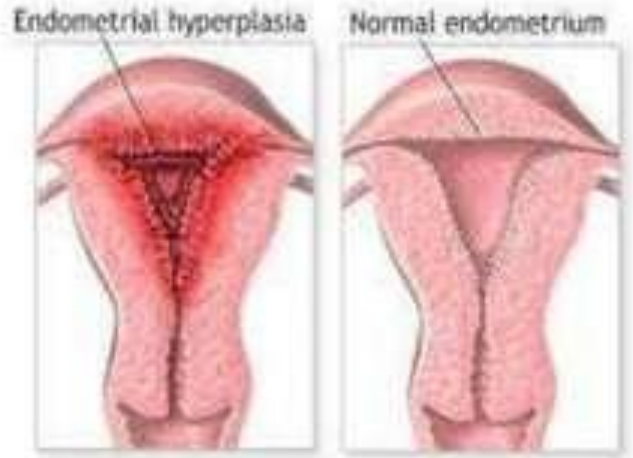
ENDOMETRIAL HYPERPLASIA



BY

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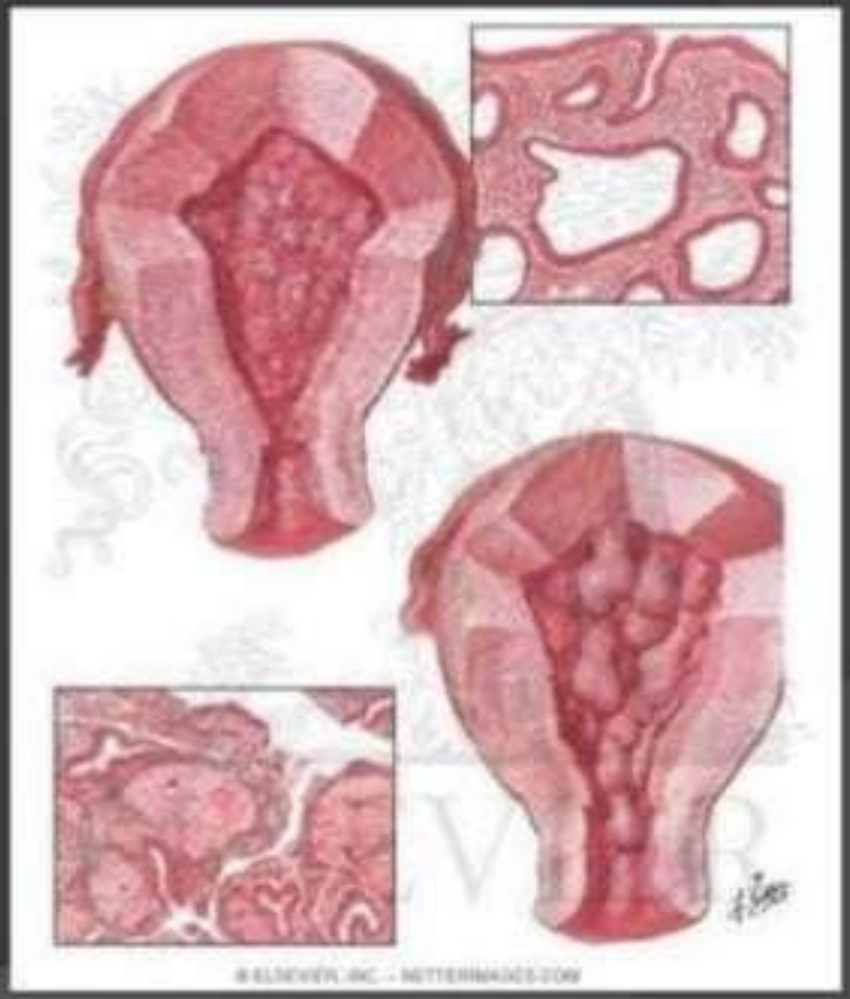
DEFINITION

Defined as an increased proliferation of the endometrial glands relative to the stroma, resulting in an increased gland-to-stroma ratio when compared with normal proliferative endometrium.

Pathogenesis

- Hyperplasia usually develops in the presence of continuous estrogen stimulation unopposed by progesterone.



- The female hormones
  1.estrogen
  2.progesterone
  Both of these hormones control the changes in the uterine lining.
- **Estrogen** builds up the uterine lining.
- **Progesterone** maintains and controls this growth.
- Estrogen without enough progesterone may cause the lining of the uterus to thicken.

- Endometrial hyperplasia is a non-cancerous condition.
- May occur in any part or all of the endometrium

AGE:

Endometrial hyperplasia is most frequently diagnosed in postmenopausal women, but women of any age can be at risk if they are exposed to a source of unopposed estrogen. Endometrial hyperplasia can frequently be seen in young women with chronic anovulation due to PCOS or obesity.

RISK FACTORS

- Unopposed estrogen stimulation
- Nulliparity
- Delayed menopause
- PCOS
- Obesity
- Diabetes
- Hypertension
- Previous radiation therapy
- Family Hx and Tamoxifen therapy

PROTECTIVE FACTOR

- Multiparity
- Normal weight
- Combined oral contraceptives
- Progesterone therapy
- Menopause <49 years of age

Clinical presentation:

1:The most common clinical presentation of patients with endometrial hyperplasia is abnormal uterine bleeding, whether in the form of menorrhagia, metrorrhagia, or postmenopausal bleeding.

2:vaginal discharge

3:lower abd pain

CLASSIFICATION

The classification system that is used most commonly is **W H O.**

Simple without atypia

Simple with atypia

Complex without atypia

Complex with atypia

The terms simple or complex refer to the glandular/stromal architectural pattern. Atypia refers to nuclear atypia.

The endometrial intraepithelial system is another classification system.

In its latest classification 5 published in 2014 WHO classified it into two categories

1:hyperplasia without atypia
2:atypical hyperplasia

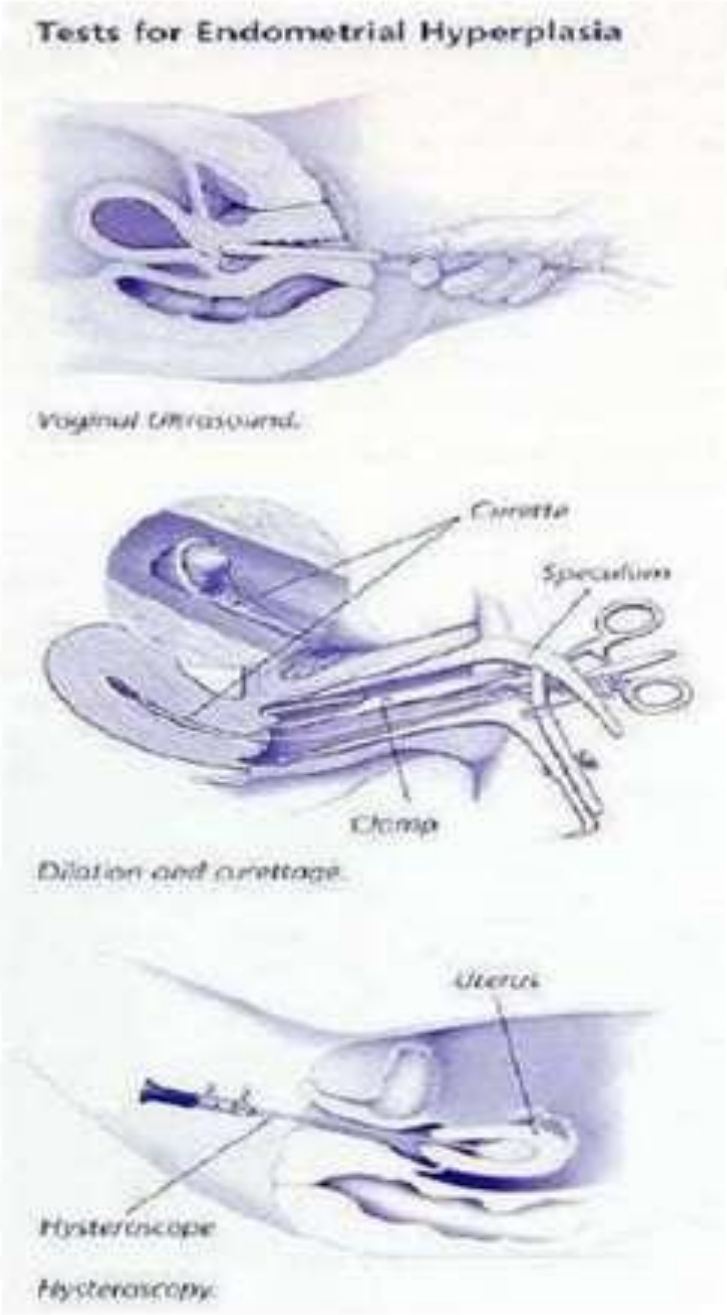
INVESTIGATIONS

When abnormal bleeding is present, a full history and physical examination is warranted with careful examination of the lower genital tract for lesions of the vulva, vagina, cervix, and palpation of uterus and ovaries. The source of vaginal discharge or bleeding, the size of the uterus and endometrial cavity, and any pelvic masses should be noted. If the patient is obese and a pelvic examination is inadequate, pelvic ultrasonography may be helpful. A diagnostic procedure is needed to rule out hyperplasia or cancer if the patient is symptomatic or has abnormal cytology.

Diagnosis of endometrial hyperplasia is usually made by sampling the endometrial cavity with an endometrial biopsy in the office or dilation and curettage in the operating room. Tissue sampling should be performed in women with risk factors who present with symptoms of abnormal vaginal bleeding or discharge. This includes women older than 35 years with abnormal bleeding, women younger than 35 years with bleeding and risk factors, women with persistent bleeding, and women with unopposed estrogen replacement or tamoxifen therapy.

Investigations

- Vaginal ultrasound
- Endometrial biopsy
- Dilation and curettage (D&C)
- Hysteroscopy



RCOG guide lines

- Management depends on many variables age, desire for fertility, symptoms
- Exclude : exogenous esrogen .and tumours
- Ttt : continous progestin therapy for 3-6 months
- Dose : premenopausal 5mg

  perimenopausal 10 mg

  Postmenopausal 20 mg or mirena
- Rebiopsy only if AUB

TREATMENT

2- HYPERPLASIA WITHOUT ATYPIA

- low risk of malignant transformation (1 to 3 percent)

Goal of treatment

- **Prevent progression to cancer**
- **Control abnormal uterine bleeding**

- Endometrial hyperplasia without atypia is usually treated with progestin therapy.

Medroxyprogesterone acetate (MPA) is the progestin that is typically used

Dose: 10 mg daily

Duration: 3-6 months.

Regimen used:
continuous dosing schedule more acceptable than a **cyclic** regimen because they do not have cyclic vaginal bleeding during treatment

cyclic regimen of MPA (eg, 10 mg daily for 12 to 14 days each month).

- **Micronized progesterone (100 to 200 mg)**

- **Levonorgestrel -releasing intrauterine device (LNG-IUD)** –

Endometrial biopsy can be performed with an intrauterine device **in place**.

- **Estrogen-progestin contraceptives** –

- **Ovulation induction** – In reproductive-age women, this approach will result in formation of a **corpus luteum** and exposure to progestins.

This may be a good option for women with endometrial hyperplasia without atypia who desire pregnancy.

Outcome

Regression was noted in up to **80%** of cases simple hyperplasia without atypia .
& up to **71%** in cases of complex hyperplasia without atypia

Follow-up

endometrial sampling : every **three** to **six** months.

- If no regression the progestin dose may be increased or a combination of a systemic progestin and the LNG-IUD may be used.
- If atypical hyperplasia or endometrial carcinoma develops, the patient should be treated as appropriate.

preventive treatment

After treatment, we suggest initiating **preventive treatment** if the patient has not resumed normal cyclic menstrual function. We rebiopsy if abnormal uterine bleeding recurs.

Management of hyperplasia *with atypia*

- **Hysterectomy** is the treatment **of choice** for women with endometrial hyperplasia with atypia who are not planning future pregnancy.
- **Progestin** therapy is an option for women who wish **to** preserve fertility or who cannot tolerate surgery.

MECHANISM OF PROGESTIN THERAPY

- decreases estrogen and progesterone **receptors**
- activates de***hydroxylase enzy.*** to convert estradiol to its less active estrone.

- activation of progesterone receptors, which results in stromal ***decidualization*** and subsequent thinning of the endometrium.

1- Progestin therapy for atypical endometrial hyperplasia

Megestrol acetate
more potent than medroxyprogesterone acetate .

May be **tabs** , **suspension** or **vials**

- **Oral dose :**

Megestrol acetate **80 mg** twice per day .
This may be **increased** to **160 mg** twice per day if there is no regression of the hyperplasia on follow-up endometrial sampling.

Other options for progestin therapy include.

- **MPA** (oral) 10 to 20 mg **daily** OR **cyclic** 12 to 14 days/month
- **Depot** medroxyprogesterone (intramuscular) 150 mg every three months
- **Micronized progesterone** (vaginal) 100 to 200 mg daily or cyclic 12 to 14 days per month
- **Levonorgestrel** -intrauterine device, duration of use one to five years

Duration of therapy

One study reported that the median time for regression on progestin therapy was **nine** months.

Outcome

Progestin therapy has been found to be an **effective treatment** for complex atypical hyperplasia in **meta-analyses** of observational data.

- meta-analysis of **14** studies with a total of 151 women reported a **regression** rate of 86 %, **relapse** rate of 26%, and live birth rate of 26 %.
- **follow-up** was 11 to 77 ms.

- meta-analysis that included **16** studies with a total of 111 women; found that disease was **persistent** in **14 %** and **relapse** in **23%.**
- **follow-up** ranged from 6 to 98 ms.

follow-up

initiation of progestin —**3** months→ **Resampling** → **persistent disease**

↓

Resampling ← Increase progestin dose

Maintenance therapy and fertility allowance .

successful regression with no evidence of hyperplasia.

If fertility is delayed

Maintainence therapy +follow up biopsy

Every 6–12 months initially

Resume fertility

Then (sample frequency)

premenopausal women, after one or two normal sampling, less frequent sampling is reasonable (eg, **every one to two years**).

postmenopausal women, we continue sampling every 6 to 12 months **indefinitely**.

When to say ..
FAILED HORMONAL TREATMENT

➢ persistent disease after **nine** months was predictive of treatment failure .

Hysterectomy

THANKYOU