ENDOMETRIAL HYPERPLASIA: WHEN TO BIOPSY?

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DISCLOSURE

Stipend

Ontario Health

LEARNING OBJECTIVES

- After attending this session, participants will be able to:

1. Identify clinical indications for endometrial biopsy.
2. Discuss risk factors for developing endometrial hyperplasia.
3. Review nomenclature for describing type of endometrial hyperplasia.
4. Utilize management strategies and therapeutic options for treating women with endometrial hyperplasia.

WHEN TO BIOPSY?

- Who should perform an endometrial biopsy?
- What criteria are used in the decision to proceed with biopsy?

CITED GUIDELINES

- Society of Obstetricians & Gynecologists of Canada (SOGC)
- American College of Obstetricians & Gynecologists (ACOG)
- National Institute of Health & Care Excellence (NICE)

ENDOMETRIAL BIOPSY IN LOW-RISK WOMEN: ARE WE OVER-INVESTIGATING JOGC.2022

- 30% of women could have avoided an endometrial biopsy
- N=209 (mean age = 45, av. BMI = 25.7)
  - 0 Neoplasia
  - 2 Atypical hyperplasia
  - 3 Hyperplasia without atypia
  - 194 Benign
  - 10 Insufficient
- Women aged 41 to 49 with AUB and no risk factors for endometrial cancer have low prevalence of malignant or premalignant pathologies

REASONS FOR ENDOMETRIAL BIOPSY

- Abnormal uterine bleeding

  - intermenstrual bleeding is associated with an increase risk of endometrial hyperplasia

- Post menopausal bleeding

  - 3.2% lifetime risk of endometrial cancer

ENDOMETRIAL SAMPLING

- Pipelle device most sensitive

  81% for detecting atypical hyperplasia

  91-99.6% for detecting endometrial cancer
- ”blind approach” samples < 50% of cavity
- Underestimate grade of pathology

HYSTEROSCOPY WITH DIRECTED SAMPLING & CURETTAGE

- Benign endometrial biopsy and persistent bleeding in high-risk patient
- Insufficient tissue with thickened endometrial lining on ultrasound
- Cervical stenosis/failed office biopsy
- Patient discomfort/anxiety

RISK FACTORS

- Menstrual
  - older age or postmenopausal status
  - nulliparity or infertility
  - early menarche or late menopause
  - anovulation, menopausal transition or polycystic ovarian syndrome

RISK FACTORS

- Comorbidities
  - obesity (BMI > 30kg/m2)
  - diabetes
  - hypertension
  - Lynch Syndrome
- Iatrogenic
  - unopposed exogenous estrogen therapy or tamoxifen

WHY RECOGNIZE RISK FACTORS?

- Unopposed estrogen exposure through endogenous and exogenous sources increases risk of endometrial pathology
  - endometrial hyperplasia
  - endometrioid endometrial carcinoma (80%)

CASE SCENARIO

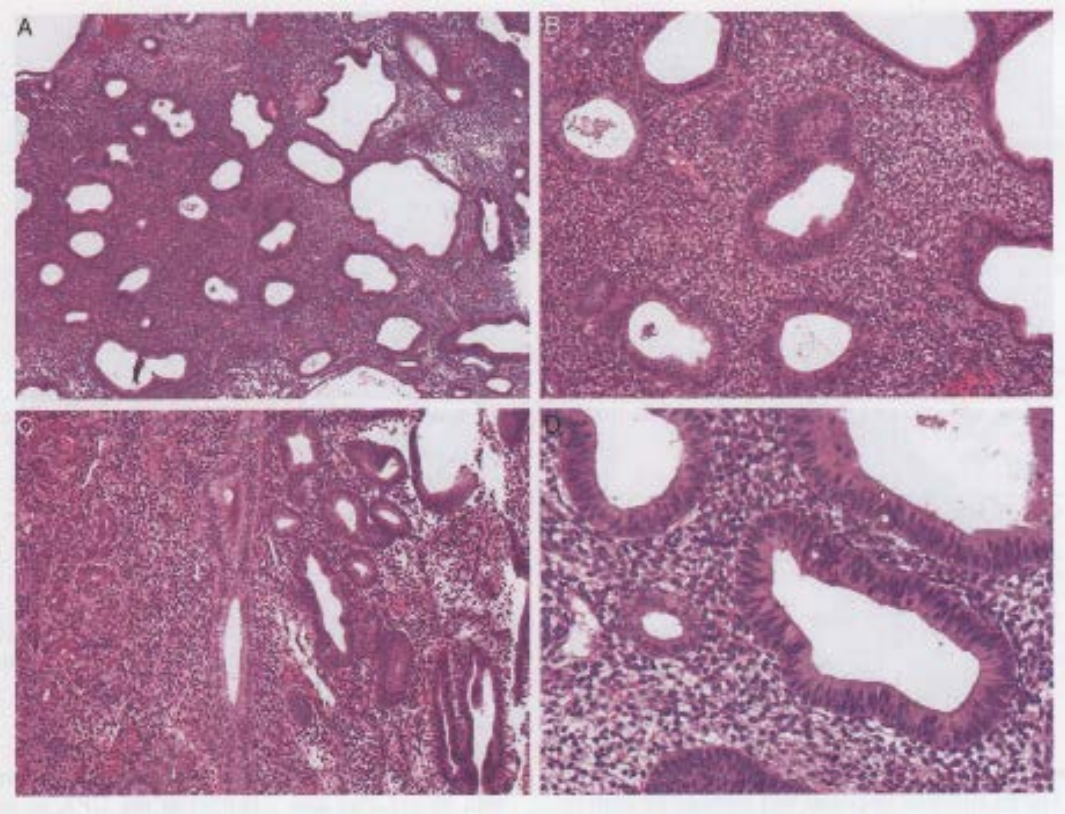
- A 42 year old G2T2L2 female presents with heavy menstrual bleeding. Her menses were previously q 28 days x 5 days now q 24 days lasting up to 7 days. She denies any dysmenorrhea but experiences fatigue which is affecting her quality of life. She is healthy on no regular medications and her BMI is 35 kg/m2. Which of the following investigations is NOT required?
  1. Complete blood count
  2. Transvaginal ultrasound
  3. Thyroid stimulating hormone
  4. Endometrial biopsy

CASE SCENARIO

- Her ultraound reveals a 3x2x2 cm intramural fibroid, an endometrial thickness of 16 mm and normal ovaries. Her hemoglobin is 110 g/L . She is up to date on her pap smear and her biopsy confirms endometrial hyperplasia without atypia. Which of the following treatment options is NOT recommended?

  1. weight loss and exercise
  2. levonorgestrel-releasing intrauterine system
  3. total hysterectomy and bilateral salpingo-oophorectomy
  4. conservative management with repeat biopsy in 6 months

ENDOMETRIAL HYPERPLASIA



ENDOMETRIAL HYPERPLASIA CLASSIFICATION

- Hyperplasia without atypia

- Hyperplasia with atypia
  - atypical hyperplasia
  - endometrial intraepithelial neoplasia (EIN)

ENDOMETRIAL HYPERPLASIA

- Hyperplasia without atypia
  - < 5% progression to carcinoma
  - 75-100% spontaneous regression rate

- Hyperplasia with atypia
  - genetic alterations and monoclonal growth similar to carcinoma
  - 40-60 % have already developed or will develop an invasive cancer

MEDICAL MANAGEMENT: HYPERPLASIA WITHOUT ATYPIA

- Up to 6 months progestin treatment to induce regression
- Endometrial biopsy every 3-6 months to ensure no disease progression
- 2 consecutive negative biopsies prior to discharge
- Reported regression rates:
  - 67% to 72% with oral progestins
  - 81% to 94% with LNG-IUS
  - 92% with injectable medroxyprogesterone acetate
- LNG-IUS recommended as first-line treatment

SURGICAL MANAGEMENT: ENDOMETRIAL HYPERPLASIA WITHOUT ATYPIA

- No regression, progression or relapses after 12 months of medical treatment
- Abnormal uterine bleeding despite treatment
- Contraindication or intolerance to medical therapy
- Inability or unwillingness to comply with surveillance
- Total hysterectomy with opportunistic salpingectomy; consider bilateral salpingo-oophorectomy in postmenopausal women

MANAGEMENT: HYPERPLASIA WITH ATYPIA

- Total hysterectomy with bilateral salpingo-oophorectomy (BSO) is treatment of choice
- Conservative treatment for poor surgical candidates include oral or local progestins, aromatase inhibitors, gonadotropin-releasing hormone agonists
- 55% to 92% regression rate and 3% to 55% recurrence rate
- Endometrial biopsy every 3 months for 2 years and every year thereafter until total hysterectomy with BSO is performed

ENDOMETRIAL HYPERPLASIA: TAKE HOME MESSAGE

- Risk factors related to estrogen exposure, intermenstrual bleeding and postmenopausal bleeding are associated with an increase risk of endometrial hyperplasia and endometrial sampling should be carried out
- Majority of cases of endometrial hyperplasia without atypia are successfully managed medically and LNG-IUS should be used as first-line treatment
- Total hysterectomy and bilateral salpingo-oophorectomy is recommended for treatment of endometrial hyperplasia with atypia in premenopausal and postmenopausal women

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DISCUSSION / QUESTIONS