

A Case of High-Grade Atypical Endometrial Hyperplasia in a 20-Year-Old Female Presenting with Abnormal Uterine Bleeding

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Background:

High-grade atypical endometrial hyperplasia is a known precursor to endometrial carcinoma, typically seen in older, postmenopausal women¹. In Australia 28% of women with endometrial hyperplasia with atypia go onto develop endometrial cancer². Its occurrence in young, premenopausal women is rare and presents unique diagnostic and management challenges¹. Early detection is crucial to prevent malignant transformation while preserving fertility, as reflected in this case study¹.

Aims

To improve diagnostic approach, and management of high-grade atypical endometrial hyperplasia in a young nulliparous female.

To emphasize the importance of early recognition and multidisciplinary teamwork.

Case

- 20-year-old female G0P0, BMI 30, presented with abnormal uterine bleeding and symptomatic anaemia
- Reported to have filled 6 pads in less than 1 hour
- O&G History: never sexually active, irregular periods, between 21- and 45-day cycle, menorrhagia since menarche at age 11, no current contraceptive/management of periods
- Initially haemoglobin (Hb) 56
- Pelvic US; Endometrial thickness 15mm, heterogenous
- Commenced tranexamic acid 1g IV
- Consented Hysteroscopy Dilatation and Curettage (HD&C) and Mirena insertion as an urgent theatre case
- While awaiting theatre, transfused with 2x pack red blood cells.
- HD&C – uncomplicated
- Discharged 2 days post operatively with significant symptomatic improvement

Results

- 2 weeks following HD&C; the patients histology was reported as:
 - **High-grade atypical endometrial hyperplasia (AH)**
- The patient was called with the results and referred onto tertiary Gynaecology Oncology team for MDT discussion and planning advice given age and wanting fertility preservation.
- MDT discussion noted the patient was suitable for local follow up with routine sampling and suggested for lifestyle modifications including weight loss, diet and exercise.
- Next routine HD&C and Mirena exchanged result 6 months (delayed due to cancellation of 3 month follow up) after initial sampling:
 - Proliferative endometrium with hormonal effect, no evidence of endometrial hyperplasia with or without atypia

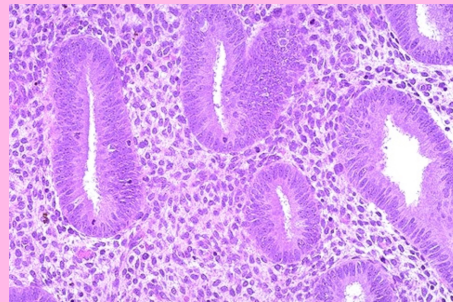


Image 1:
Normal proliferative
endometrium³

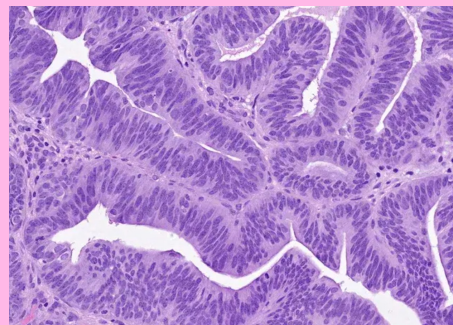


Image 2:
Atypical
endometrium
Hyperplasia⁴

Discussion

- Importance of Early Diagnosis: High-grade atypical endometrial hyperplasia significantly increases the risk of endometrial carcinoma, necessitating timely intervention^{1,2}.
- Management Strategies: Levonorgestrel intrauterine device (Mirena) is the first-line treatment in young women desiring fertility preservation¹. Hysterectomy remains the definitive option for those who have completed childbearing or in cases of treatment failure/disease progression¹.
- Role of Histological Assessment: This case highlights the importance of endometrial sampling following D&C in young women with abnormal uterine bleeding, even without traditional risk factors.
- Multidisciplinary Approach: Collaboration between obstetricians, gynaecology oncologists, and fertility specialists ensures individualised management, balancing oncologic safety with reproductive goals.

Conclusion

This case emphasizes the need for increased awareness of atypical endometrial hyperplasia in young women presenting with abnormal uterine bleeding. Early histopathological evaluation, personalised medical management, and a multidisciplinary approach are key to preventing progression to endometrial carcinoma while considering fertility preservation options.

References:

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