Progestin Therapy for Endometrial Hyperplasia:
Effectiveness, Response Monitoring and Prevention of Recurrence

Kozar Oleh Mykhailovych, PhD

Assistant at the Department of Obstetrics, Gynecology and Perinatology
Bukovinian State Medical University (Chernivtsi, Ukraine)

1 BACKGROUND

Endometrial hyperplasia (EH) is a common gynaecological condition associated with abnormal uterine bleeding and an increased risk of endometrial carcinoma.

The risk of progression depends on histological type (with or without atypia), clinical factors and individual risk profile.

Timely and evidence-based management is essential to reduce the risk of progression, achieve histological regression and prevent recurrence.

2 AIM

To evaluate the effectiveness of progestin therapy for endometrial hyperplasia, approaches to monitoring treatment response and strategies for recurrence prevention based on current national and international guidelines.

3 MANAGEMENT ACCORDING TO CURRENT GUIDELINES

Endometrial hyperplasia without atypia

- Progestin therapy is recommended as first-line treatment (oral progestins or LNG-IUS).
- Continuous oral progestins or LNG-IUS are preferred.
- Treatment duration: at least 6 months.
- Histological reassessment is recommended to confirm response.
- Address and manage modifiable risk factors (e.g. obesity, PCOS, chronic anovulation, tamoxifen use).

Atypical hyperplasia / Endometrial intraepithelial neoplasia (EIN)

- Progestin therapy is recommended for women desiring fertility or who are not candidates for immediate hysterectomy.
- LNG-IUS is preferred; continuous oral progestins is an alternative.
- Histological reassessment every 3–6 months.
- If no response after 6–12 months or progression occurs – hysterectomy is recommended.
- Fertility-sparing treatment should be performed under careful surveillance.

4 DISCUSSION

4.1 PROGESTIN THERAPY REGIMENS

Levonorgestrel-releasing intrauterine system (LNG-IUS)

- Preferred option (higher regression rates, lower recurrence risk).
- Effective in EH without atypia and selected cases of atypical EH/EIN.

Oral progestins

- Medroxyprogesterone acetate 10–20 mg/day or dydrogesterone 10 mg 2–3 times/day (continuous regimen).
- Cyclic regimens are less effective and not preferred.

Duration of therapy

- Minimum 6 months.
- Longer duration (6–12 months) may be required in high-risk patients or in cases of incomplete response.

4.2 EFFECTIVENESS OF PROGESTIN THERAPY

Histological type	Treatment modality	Regression rate (%)	Recurrence rate after response (%)
EH without atypia	LNG-IUS	85–96	6–21
	Oral progestins	72–92	13–30
Atypical hyperplasia / EIN (fertility-sparing)	LNG-IUS	66–100	18–38
	Oral progestins	50–80	20–41

- LNG-IUS demonstrates higher regression rates and lower recurrence compared to oral progestins.
- Continuous progestin regimens are more effective than cyclic regimens.
- Histological regression is usually achieved within 3–6 months, but longer treatment and follow-up are recommended in high-risk patients.

4.3 MONITORING TREATMENT RESPONSE

Clinical evaluation

- Assessment of symptoms (bleeding pattern, tolerability, side effects).

Transvaginal ultrasound

- Endometrial thickness monitoring. Useful for initial assessment and follow-up.

Endometrial sampling (hysteroscopy with biopsy or pipelle biopsy)

- Recommended at 6 months to confirm histological response.
- If no regression – continue therapy and repeat biopsy at 6–12 months.

4.4 PREVENTION OF RECURRENCE

Weight management

- Lifestyle modification and weight reduction in overweight/obese patients.

Treatment of underlying conditions

- Management of anovulation, PCOS, endocrine disorders.

Avoidance of unopposed estrogen exposure

- Review of hormone therapy and tamoxifen use.

Maintenance therapy

- Consider LNG-IUS for long-term prevention in high-risk patients.

Regular follow-up

- Clinical and ultrasound assessment; repeat endometrial sampling in selected cases.

5 CONCLUSIONS

1. Progestin therapy is an effective and safe first-line treatment for endometrial hyperplasia without atypia.
2. LNG-IUS provides higher regression rates and lower recurrence compared to oral progestins.
3. Regular monitoring with clinical assessment, ultrasound and histological evaluation is essential to confirm response.
4. Management of risk factors and consideration of maintenance therapy help prevent recurrence and improve long-term outcomes.