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CLINICO-MORPHOLOGICAL CORRELATION OF HYSTEROSCOPIC ENDOMETRIAL PATTERNS IN ABNORMAL UTERINE BLEEDING IN REPRODUCTIVE-AGE WOMEN

Objective. To evaluate the clinico-morphological correlation between hysteroscopic endometrial patterns and histopathological findings in reproductive-age women presenting with AUB.

Methods. A prospective observational study included reproductive-age women (18–45 years) presenting with AUB. All patients underwent hysteroscopy during the early proliferative phase of the menstrual cycle, followed by targeted endometrial biopsy. Hysteroscopic findings were classified into the following patterns: normal proliferative/secretory endometrium, focal polypoid lesions, diffuse hyperplasia-like thickening, irregular vascular pattern, micropolyposis, and inflammatory changes. Histological assessment was performed using hematoxylin–eosin staining; immunohistochemistry was applied when indicated. Statistical analysis included calculation of sensitivity, specificity, and concordance rate between hysteroscopic impression and histopathological diagnosis.

Results. Preliminary analysis demonstrated a significant correlation between focal hysteroscopic lesions and histologically confirmed endometrial polyps (high positive predictive value). Diffuse thickened endometrium was frequently associated with simple endometrial hyperplasia without atypia, whereas irregular vascular and micropolyposis patterns showed variable correlation with chronic inflammatory changes. Overall concordance between hysteroscopic assessment and histopathology was high for structural lesions (polyps, submucosal fibroids) and moderate for non-structural causes (endometrial dysfunction, inflammatory changes).

Conclusion.

Hysteroscopy provides high diagnostic accuracy for structural causes of AUB and enables targeted biopsy, significantly improving morphological verification. However, inflammatory and functional endometrial alterations require histopathological confirmation due to limited visual specificity. Clinico-morphological correlation enhances diagnostic precision and supports

individualized therapeutic decision-making in reproductive-age women with AUB.

References:

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