



THE USE OF HYSTEROSCOPY IN FERTILITY WORKUP

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This lecture-based review explores the dynamic physiology of the endometrium through the lens of modern hysteroscopy, emphasizing the importance of correlating visual findings with histopathological and hormonal data. The authors present a refined, patient-friendly hysteroscopic technique using liquid distension, eliminating the need for a speculum or tenaculum. Detailed descriptions of the endometrial changes across the menstrual cycle—from the early proliferative phase to menstruation—highlight the evolving vascular patterns, glandular morphology, and stromal characteristics, offering critical insights into the concept that anatomical normality does not necessarily equate to physiological functionality.

A particular focus is given to contact hysteroscopy, vascular assessment, and interpretation of stromal and glandular features in various phases, especially the mid-late proliferative window crucial for implantation. The concept of "impaired inflammatory states" of the endometrium (ISA) is introduced, challenging traditional infection-based models and incorporating broader etiologies such as metabolic, allergic, and hormonal factors. The work underlines the limitations of hysteroscopy alone and advocates for integrated diagnostic strategies involving pathology, particularly in identifying atypical hyperplasia, adenomyosis, and pseudo-functional endometrial patterns. The lecture concludes by reinforcing the need for precise phase-based evaluation and interdisciplinary collaboration to optimize diagnostic accuracy and fertility outcomes.