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CAUSES OF ENDOMETRIAL POLYPS IN WOMEN OF REPRODUCTIVE AGE AND THEIR IMPACT ON FERTILITY

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Background:

Endometrial polyps are one of the most common benign intrauterine pathologies among women of reproductive age. They consist of localized overgrowths of endometrial glands and stroma, which may interfere with normal implantation and fertility. The increasing prevalence of endometrial polyps in younger women highlights the need for understanding their etiological factors and reproductive consequences.

Aim:

To analyze the main causes of endometrial polyp formation in reproductive-age women and assess their impact on conception and pregnancy outcomes.

Methods:

A review of scientific literature published between 2015 and 2024 was conducted using databases such as PubMed, Scopus, and Google Scholar. Studies addressing hormonal, inflammatory, metabolic, and molecular factors contributing to polyp development were included. Particular attention was given to studies evaluating infertility and early pregnancy loss in women with endometrial polyps.

Results:

Evidence suggests that estrogen-progesterone imbalance, chronic endometritis, insulin resistance, and oxidative stress play major roles in polyp formation. High local concentrations of estrogen stimulate endometrial proliferation, while inadequate progesterone leads to incomplete shedding of the endometrium. Chronic inflammation induces stromal remodeling, and insulin resistance promotes hyperplastic changes. Women with untreated polyps show decreased implantation rates and higher risks of early miscarriage due to altered endometrial receptivity. Removal of polyps has been associated with improved fertility outcomes in several clinical trials.

Conclusion:

Endometrial polyps in women of reproductive age result from multifactorial hormonal and inflammatory mechanisms. Their timely diagnosis and management are crucial for improving endometrial function and achieving successful pregnancy. Further studies are needed to explore molecular pathways linking polyps to infertility.

References:

1. Salim, R., & Woelfer, B. (2020). Endometrial polyps and subfertility. *Human Reproduction Update*, 26(2), 227–244.
2. Cicinelli, E., et al. (2022). Role of chronic endometritis in the pathogenesis of endometrial polyps. *Journal of Minimally Invasive Gynecology*, 29(1), 45–53.