

The three entities, peritoneal, ovarian and rectovaginal and their relationship with infertility

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OBJECTIVE: To review the histogenesis of peritoneal, ovarian and rectovaginal endometriotic lesions.

DESIGN: The comparison of morphological, morphometric and histochemical data observed in each type of lesion.

SETTING: University Hospital, Department of Gynecology.

RESULTS: Three types of endometriotic lesions must be considered: peritoneal, ovarian and rectovaginal. Morphological and morphometric data showed similarities between eutopic endometrium and red peritoneal lesions, suggesting that these lesions are the first stage of early implantation of endometrial glands and stroma. After partial shedding, the red lesions regrow constantly and the shedding induces an inflammatory reaction provoking scarification and the lesions become black. The subsequent fibrosis leads to areas of white opacification which are inactive.

The pathogenesis of ovarian endometriomas is a source of controversy. Although there seems to be a consensus concerning the " invagination " theory, a contradiction still exists between the implantation theory and the metaplasia theory. We recently showed that the mesothelium covering the ovary can invaginate into the ovarian cortex pushing back the primordial follicles. The presence of mesothelial invagination in continuum with endometriotic tissue suggests the metaplastic histogenesis of ovarian endometriotic lesions.

The rectovaginal endometriotic nodule must be considered as an adenomyoma, consisting of smooth muscle with active glandular epithelium and scanty stroma. Immunocytochemical results showed the poor differentiation and hormonal independence of these lesions and indicated a close relationship with their mesodermal Müllerian origin.

CONCLUSION: These three types of lesions, peritoneal, ovarian and rectovaginal, must be considered as three separate entities with different pathogeneses.