

Duplications of the Müllerian System and Pelvic Endometriosis

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This study reports on 20 young adult female patients who presented with chronic pelvic pain and distinctive endometriotic lesions confined to the posterior pelvic peritoneum (posterior broad ligaments, uterosacral ligaments and cul-de-sac of Douglas). At laparoscopy minute, firm, endometriotic lesions were found on the rims or in the depths of elliptical peritoneal defects limited to the posterior pelvis. The peritoneal defects were unilateral or bilateral, single or multiple. Microscopically the endometriotic lesions were characterized by stroma and glands, including cystically dilated glands which often contained inspissated debris and hemosiderin. The endometriotic foci were generally accompanied by hypertrophied smooth muscle, dense fibrous connective tissue, bundles of peripheral nerve, thick-walled, congested telangiectatic blood vessels, microcalcifications and infiltrates of small lymphocytes and mononuclear cells. The importance of recognizing these lesions during laparoscopic examination of the pelvis is emphasized. They are inconspicuous due to their neutral coloration and unusual location within peritoneal defects, in contrast to the typical acquired endometriotic plaque or nodule.

We hypothesize that these lesions (peritoneal defects with endometriosis) represent rudimentary duplications of the müllerian ducts which arise on the anteromedial surface of the genital ridge. At the time of fusion of the müllerian tubes to form the uterus and upper vagina, this anteromedial surface becomes the posterior aspect of the broad ligaments and posterior cul-de-sac. We believe that this form of endometriosis may be a congenital anomaly persisting under the influence of maternal hormones but regressing after birth. During childhood, this anomalous tissue is thought to atrophy leaving the characteristic elliptical defects in the peritoneum. At menarche these endometriotic foci may be reactivated resulting in pelvic pain. We present the results of our search for verification of these hypotheses in fetal and autopsy material from premenarchal females. Immunocytochemical characterization of the structures observed in our biopsies will also be described. The clinicopathologic characteristics of this lesion will be compared to those of typical acquired endometriosis.

Cytologic Investigation of Fluid from the Pouch of Douglas and Its Connection with Laparoscopic Findings

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Sixty-seven women with primary or secondary infertility were subjected to laparoscopy. Fluid from the pouch of Douglas was aspirated and examined cytologically. The cytologic evaluation included examination for mesothelial cells, macrophages, endome-