Endometrial histopathology in patients with laparoscopically proven salpingitis and HIV-1 infection

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Abstract:

Study Objective. To identify sensitive and specific histological criteria for endometritis in women with laparoscopically-confirmed acute salpingitis. Methods. Women, age 18-40 years of age presenting with complaints of lower abdominal pain ≤ 2 weeks and no antibiotics use in past two weeks, were enrolled. They underwent clinical examination, screening for HIV; other sexually transmitted infections plus endometrial biopsy sampling for histopathology. Diagnostic laparoscopy confirmed the diagnosis of acute salpingitis. Controls were women undergoing tubal ligation and HIV-1 infected women asymptomatic for genital tract infection. Results. Of 125 women with laparoscopically-confirmed salpingitis, 38% were HIV-1 seropositive. Nineteen HIV-1 negative controls were recruited. For the diagnosis of endometritis, ≥1 plasma cells (PC) and ≥3 polymorphonuclear lymphocytes (PMN) per HPF in the endometrium had a sensitivity of 74% for HIV-1-seropositive, 63% for HIV-1-seronegative women with a specificity of 75% and positive predictive value of 85% regardless of HIV-1-infection for predicting moderate to severe salpingitis. For HIV-1-seronegative women with mild salpingitis, ≥1 PC and ≥3 PMN had a sensitivity of 16% and a PPV of 57%. Conclusion. Endometrial histology, did not perform well as a surrogate marker for moderate to severe salpingitis, and failed as a surrogate marker for mild salpingitis.