



SEXUALLY TRANSMITTED INFECTIONS, HIV/AIDS

CHLAMYDIAL CERVICITIS: PATHOGENESIS IN WOMEN WITH CERVICAL SCARS

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Introduction: Chlamydial infection is commonly associated with cervical pathology. In patients with cervical scars, local immunity impairment promotes non-specific cervicitis persistence. Association with chlamydial infection may lead to relapses of pathological processes.

Objective: To investigate the pathogenetic features of chlamydial cervicitis in women with cervical scars.

Materials and Methods: 91 female patients with chlamydial cervicitis were distributed into 3 groups: #1 – 30 patients with cervical scars administered Doxycycline 100 mg BID for 21 days; #2 – 31 patients with cervical scars who underwent reconstructive-plastic surgeries restoring normal cervical canal architecture against the background of Doxycycline; #3 – 30 patients with normal cervical canal architecture who were administered Doxycycline. To evaluate reproductive function recovery in convalescent Group 2 patients, fertile properties of the cervical mucus were analyzed.

Results: Clinicalµbiological convalescence was achieved in 76.7% patients of Group 1, which is lower ($p=0.0107$) than treatment efficacy in Groups 2 (96.8%) and 3 (96.7%). In 30% female convalescents from Group 2, cervical mucus was characterized by altered physical & biological properties and spermatozoa penetration test. Ultrastructural histology of biopsy specimens revealed two main variants of changes: in 5 patients signs of focal endocervicitis were noted, while 4 patients had sclerotic epithelial changes.

Conclusions: Surgical restoration of cervical canal continuity creates conditions to eliminate factors causing chronic inflammation, in particular to exclude vaginal acid contents reflux onto the columnar endocervical epithelium and to normalize biophysical movements of various cervical mucus plug layers, promoting removal of antigen-antibody complexes





located on the columnar epithelium surface. All these factors contribute to the recovery of local immunocompetence and the increased efficacy of antibiotic treatment of chlamydial infection in patients with cervical scars. After surgical treatment of chlamydial cervicitis combined with cervical scars, 30% convalescent patients demonstrate impaired fertile properties of the cervical mucus and ultrastructural changes in the endocervical epithelium.

