

The characteristics of disorders of reproductive function in women with genital tuberculosis

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Context Genital tuberculosis in women is the most common in reproductive age, leading to significant damage of the reproductive organs and infertility even after polychemotherapy.

Objective To evaluate the causes of infertility in women with genital tuberculosis.

Methods All patients underwent laparoscopy, chromohydrotubation, hysteroscopy with endometrial biopsy. The processing of surgical material for histological and immunohistochemical examinations was carried out according to a generally accepted procedure. Hormonal research was conducted in the dynamics of the menstrual cycle with the determination of FSH, LH, AMG, inhibin B, estradiol, testosterone, prolactin, progesterone in peripheral blood by the method of enzyme immunoassay.

Patient(s) The study included 89 women with verified genital tuberculosis who received complex etiotropic therapy for 6 months before the present examination. The mean age was 32.43 ± 0.73 years. Infertility lasting from 1 year to 27 years was detected in 77.86% of patients.

Intervention(s) Immunohistochemical study of endometrial biopsy specimens on the 18-22 day of the menstrual cycle was performed to quantify the number of CD16 + (clone 2H7), CD56 + (56C04), CD20 + (clone L26); CD138 + (clone M115) in standard dilution. Criteria for the diagnosis of chronic endometritis were: an increase in the number of B-lymphocytes 2 and more times, as well as the presence of plasma cells.

Main Outcome Measure(s) The parameters of gonadotropic hormones, testosterone and prolactin were within the reference values. An average AMG value was 0.398 ± 0.09 g / ml, FSH - 9.09 ± 1.04 mIU/ml.

Result(s) In 72.7% of the examined patients, IV and III of the adhesion disease were found with formation of one or two-sided hydrosalpinx in a third of patients. In this study, a reduced ovarian reserve was determined in 43.3% of the examined women. Chronic endometritis was detected in 51.47% of patients. Positive response to the marker of plasma cells CD138 was noted in 47.6% of patients. In most cases, there was an increase in the number of cytotoxic lymphocytes (CD 56+ CD 16+) over the cells of other populations.

Conclusions. A specific infection in the genital organs leads to a decrease in the ovarian reserve and ovarian dysfunction. In the structure of the causes of reproductive harm in women with genital tuberculosis, there was a combination of tubal-peritoneal, uterine factors, and infertility due to a decrease in the ovarian reserve.