

Infected Wound Treatment in an Obstetric Practice with Use of the Preparation Mycoton

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The frequency of infection of tissues of the perineum and anterior abdominal wall after cesarian section is between 21% and 35% in obstetric practice. Thus the frequency of occurrence of infiltrates and ulcers oscillates between 20% and 29%. One of the causes of the appearance of purulent septic complications is the development of a transitional immunodeficiency at pregnancy that can develop into a secondary immunodeficiency in the puerperal period. Therefore, for successful treatment of infected wounds, use of drugs with complex mechanisms of action is necessary. Such a drug will bring about detoxication of an organism, recovery of immunodeficiency, and depression of bacterial infection.

The preparation Mycoton has such properties. It was obtained from Higher Basidiomycetes, Aphyllophorales. Because of the availability of chitin in its structure, Mycoton has high sorption properties. Glucans and melanins provide immunomodulating and bacteriostatic properties. Mycoton preparations for peroral and for external application were utilized.

Clinical tests of Mycoton were carried out in the Puerperal Hospital No. 7 in Kiev. The tests were carried out on 23 patients with wound infections (19 with a disjunction of sutures of the perineum after labor and 4 with suppurations after caesarean section). The patients received Mycoton *per os* for 2 days, 6 times per day at a dose of 0.5 g each and 3 times per day on the subsequent 6 days. Simultaneously the Mycoton applications were applied on the wound surface 3–4 times per day. There were 14 patients in a control group. They received conventional treatment with the use of 10% of sodium salt, dioxydinum,

and Vishnevsky linimentum.

Efficiency of treatment is determined with the help of a bacteriological analysis of a wound bioassay. Bacterial dissemination in a bioassay is studied in progress: before treatment, and on the 3rd, 5th–6th, and 8th–9th days of treatment. Changes in immune status are estimated by analysis of immunocompetent cells, determination of cytophagocyte number, and immunoglobulins.

The bacteriological analyses allowed sowing 55 strains of microorganisms from the bioassay. Sixteen of them were strictly obligatory and 39 were aerobes or facultative anaerobes. The degree of wound dissemination by pathogenic microflora before treatment oscillated within the limits of 10^5 – 10^9 m.o./g of bioassay. During treatment a reduction of wound dissemination was obtained. During treatment with Mycoton, at 3 days there was 10 – 10^3 m.o./g; at 5–6 days bacteria were present only in 2 patients out of 23 and the level of dissemination was within the limit of 10 m.o./g. Wounds for all patients in this group were sterile at 9 days. In the control group on conventional treatment, at 3 days wound dissemination was 10^5 – 10^8 m.o./g, at 5–6 days it had decreased insignificantly— 10^5 – 10^6 ; at 9 days it was at a critical level— 10^1 – 10^5 m.o./g.

Immunological research has shown that with Mycoton treatment, the quantity of T lymphocytes was increased by 30%, including T helpers at 25% and T suppressors at 29%. The quantity of active lymphocytes was increased by 57%. In the control group of patients such dynamics were not observed. The outcomes obtained proclaim the great effectiveness of Mycoton and enhance the prospects of its broad application in purulent wound treatment.