

SIGNIFICANCE OF MICROORGANISMUS IN SURGICAL WOUNDS

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Aim: To correlate the results for microbiological tests methods and verify whether the imprint method is more informative in comparison with the swab one.

Material and method: Our study compares the results of two methods of sample collection from postoperative wounds for microbiological tests: swab samples and imprints of filter sheets on blood agar. The analysis of a swab informs us about the presence of a pathogen. However, the imprint provides the same result and moreover it also informs us about the quantitative representation of microorganisms in the analysed area. We assess the cultivation tests using both methods, the amount of leucocytes in the complete blood count, CRP and local clinical symptoms of infection. We analyze all types of early infections.

Findings: We collected samples using both methods from 15 patients who underwent laparoscopy, laparotomy and pleurostomy, also in the case of extensive skin defects. We evaluated the value of inflammatory parameters in this patients during the last 6 month. The strains and frequencies of pathogens detected in the swabs are not same as pathogens those detected in the imprints. Infection does not always increase inflammatory parameters. Our results for the two methods differ significantly, they were identical only in 18% of the cases. We must bear in mind that a correct interpretation of the results is essential.

Conclusion: Infections can be prevented. The importance and impact of wound infections is difficult to assess and it is outright impossible to quantify pain, social and health consequences. In terms of an assessment, most frequently the length of hospitalization is compared in the case of patients with and without infections. With early infections a period of hospitalization extended by 9 to 24 days. It has been verified in the course of time that eliminating sources of infection is crucial – “conditio sine qua non”.