



INFLUENCE OF IMMUNOREACTIVITY TYPE UPON POSTOPERATIVE STATUS OF PATIENTS WITH COLO-RECTAL CANCER (CRC)

K. Metodiev, M. Bozhkov*, T. Temelkov*, G. Kaprelyan, B. Kornovski*

Department of Microbiology, *Department of Surgery, Varna

The problems of cancer, regardless of its clinical localization, are principally directed to the impossibility to identify and to precisionize the role of the immune system in the course of development of cancer process. The only fact confirmed at present is that by using future selective (at definite level of performance of the immune response against tumour antigens) immunomodulators we could most probably have a positive specific therapeutic effect. Naturally, when it is a question of urgent surgical interventions, it is most essential to evaluate (again based on a dynamic analysis of the immune status before and after operation) the actual criteria and indications for surgical treatment. Therefore, being unable to apply those future immunomodulators at the moment, we suggest our model of immunologic monitoring for patients with colo-rectal cancer (CRC) in order to diagnose the stages of cancer process, to predict postoperative state, to find out the necessity (or not?) of operative treatment, as well as to control the applied immunotherapy, corticosteroids, etc.

Our study covers 54 patients with verified CRC from the Clinic of Proctology. The examined contingent is shown on table 1.

Table 1. Contingent of examined patients

Contingent	Total number	Age	Male	Female
Patients	54	29-74	39 (72%)	15 (28%)

The following methods are applied in dynamic immunologic monitoring: 1) reaction blast-transformation - RBT; 2) T-RFC and B-RFC; 3) T-helper and T-suppressor cells, index Th/Ts; 4) monocyte rosettes (receptors Fc and C3); 5) eosinophile activity (in %); 6) macrophage activity (NBT-test), spectrophotometric ED; 7) enzymatic activity (SDH, α -GPDH, LDH); 8) C3-complement component; 9) circulating immune complexes, CIC; 10) lysozyme (in serum); 11) clinico-laboratory data (in regard to CRC).

The periods of dynamic investigation of CRC patients are as follows: 1) date of admission, before operation (if indicated?); 2) intraoperative investigation; 3) early postoperative period (48 h); 4) postoperative examination (up to 10 days); 5) late postoperative screening (1-2...? months).

Fig. 1 shows the dynamics of all tests applied in our model of immunologic monitoring parallelly and simultaneously for any individual patient. It is obvious that there are certain changes in the activity of the cellular, humoral immunity, specific tests corresponding to various periods before, during and after operation.

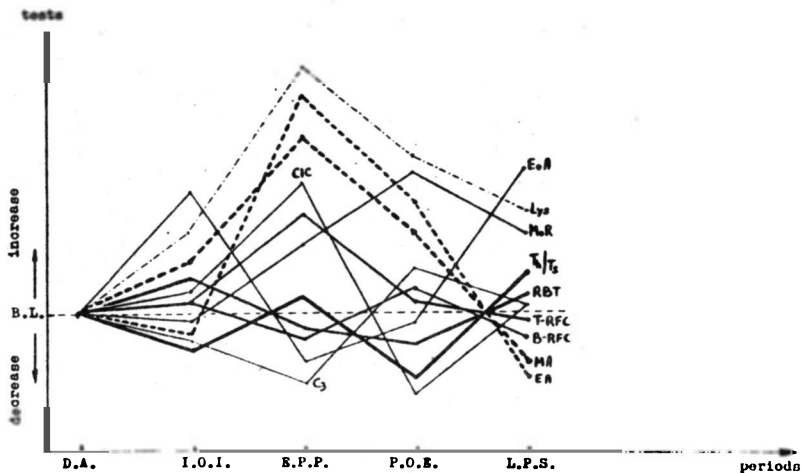


Fig. 1. Graphical presentation of tests in dynamics

D.A. - date of admittance; I.O.I. - intraoperative investigation; E.P.P. - early postoperative period; P.O.E. - postoperative examination; L.P.S. - late postoperative screening; B.L. - background level

The background data allow to determine also high or low immune response. As a result, patients with higher type have better postoperative fate, less recidivs, quicker restoration; patients with lower type - often lethality (11 from 54 patients with CRC die; 9 from 11 with lower type). Based on our complex analysis we could suggest certain immunologic criteria for CRC patients indicated to surgical treatment.