

# Turkish Journal of Medical Sciences

Turkish Journal

of

Medical Sciences

The Role of Immunological Factors in Wound Infections (A Prospective Clinical Study)

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 [Keywords](#)

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**Abstract:** Wound infections are among the major problems complicating surgical procedures. The aim of this study was to investigate the relationship between the immunological status of the patient and wound infections. Wounds were classified as clean, clean-contaminated, contaminated and dirty. T-lymphocyte(CD3+), B-lymphocyte (CD19+) and total lymphocyte(CD45+) counts, and IgG, IgM, IgA levels were measured at the beginning of treatment, and on the fifth and tenth days. The levels of CD3+, CD19+, CD45+, IgGM, IgA were not different in the groups, while in the dirty group, IgG levels were lower than in the other groups, at the beginning of treatment ( $P<0.05$ ). On the fifth and tenth days of the treatment, IgG levels increased and CD19+ level decreased in the dirty group ( $P>0.05$ ). There was no change in the levels of CD3+, CD19+, CD45+, IgG, IgM or IgA in the clean, clean-contaminated and contaminated groups on the tenth day of the treatment. In conclusion, low preoperative IgG levels and a progressive decrease in CD19+ levels throughout the postoperative period indicate a high risk for the development of wound infections. The value of the supportive administration of IgG and CD19+ for these patients in an attempt to prevent the development of infections should be further investigated.

**Key Words:** wound infection, lymphocytes, immunoglobulins.

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Turk J Med Sci 2000; **30**(3): 275-280.

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