

IMMUNOLOGICAL STRUCTURE OF PERTUSSIS IN POPULATION OF LVIV REGION

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According to literature, in close contact within family circle, adults having typical and especially atypical forms of pertussis might be a source of infection for children.

Aim: To carry out serological surveillance among adult population in order to quantify pertussis immunoglobulins G (IgG).

Materials & Methods: The study of the immunological structure of adult population concerning pertussis germ has been carried out on 80 people over the age of 18. The level of specific antibodies has been identified by ELISA test-system sero pertussis tm IgG enzyme-linked immunosorbent assay (ELISA) Savyon Diagnostics Ltd, Israel. The study has been conducted in four age groups: 18-25, 26-40, 41-55 and over 55 years old. Statistical processing of data was obtained by means of intensive, extensive and mid-values assessment using Mann-Whitney U test. Anti-pertussis immunity stress level was estimated by such criteria: up to 9.9 BU/ml-antibody-negative people; 10.0-49.0 BU/ml-antibody-positive people, those whose antibodies indicate that the person has already suffered from pertussis or has received immunization; 50 BU/ml and more highly positive antibodies level indicating the period of recovery from pertussis (according to manufacturer's instruction).

Results: The number of antibody-negative population is 50%. High titres of specific immunoglobulins G were identified in 3.75% of people, which indicates the period of recovery from pertussis. There were no important differences found in the levels of immunoglobulins G between the population of cities and villages.

Conclusions: Usage of this method proves that there are cases of adults suffering from pertussis, which are caused by the lack of awareness of health care professionals about case rate of pertussis in the particular age group. The fact that there are antibody-negative adults proves the necessity of anti-pertussis revaccination of the adult population.

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