Seroepidemiology of rubella in students of Arak University of Medical Sciences, Three years after national vaccination program

Abstract

Background and objectives: Since Rubella is an infectious disease with a few clinical symptoms, it is hardly diagnosed. Especially in the first trimester of pregnancy, congenital rubella is one of the major causes of neonatal mortality and permanent disablement in children. The aim of this study was to determine the sero immunity Level of The single Female student's after national rubella vaccination program in Iran.

Material and Methods: This descriptive seroepidemiologic study was conducted on 129 single medical students. After taking written consent form, blood Sample was drawn. The anti-rubella IgG titer was evaluated using ELISA method. Statistical analysis was performed using SPSS (version10).

Results: All Subjects had protective titer of anti-rubella antibodies. One hundred and eighteen students (91.5%) were immunized by taking rubella vaccine in the national vaccination program and only 11(8.5%) students reported that they suffered from natural rubella infection in the past.

Conclusion: Based on the results of our study, vaccination against rubella in national vaccination program along with natural immunity caused by natural rubella infection in children could produce a protective immunity against rubella.

Key words: Rubella, ELISA, vaccination, medical students.