SUMMARY

Objective: to ascertain the seroprevalence of antibodies to varicella-zoster virus in the Madrid population prior to the introduction of vaccination.

Study design: Cross-sectional antibody seroprevalence study.

Methods: Population: persons aged 2 to 40 years in Madrid. Field work: September 1999 to April 2000. Data were collected on demographic and socio-economic variables and on a number of exposures. IgG antibodies were determined using Enzyme Linked ImmunoSorbent Assay (ELISA), and antibody prevalence broken down by age group. Logistic regression was used to analyse the association between the presence of antibodies and the respective study variables. The results were compared against those of an earlier seroprevalence survey in Madrid (1993).

Results: A total of 2,131 subjects were included, with a non-response rate of 20.4%. Antibody prevalence was estimated at 90.2%; the 90% mark was reached at 11 years of age and almost 100% of adults presented with antibodies. In the case of children, school attendance associated with the presence of antibodies. No significant differences were observed vis-à-vis the results of the earlier survey.

Conclusions: The seroprevalence profile coincides with those of other Spanish regions and European countries, and remains stable over time. Antibody presence rises sharply in children from aged 2 years to adolescence. Further seroprevalence studies are called for to study the disease trend and assess preventive measures.

Key words: varicella zoster virus, seroepidemiologic studies, immunity, vaccination, public health policies

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