

ANTIBODY RESPONSES TO INACTIVATED SUBUNIT INFLUENZA VACCINE IN PATIENTS WITH WEGENER'S GRANULOMATOSIS

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The aim of this study was to assess humoral responses to influenza vaccine in two groups of patients with Wegener's granulomatosis: 35 patients in clinical and serological remission after immunosuppressive treatment who were vaccinated in autumn 2006 (Group I) and 28 patients with Wegener's granulomatosis treated immunosuppressively who were not vaccinated (Group II). Antibody levels to hemagglutinin and to neuraminidase antigens were measured before vaccination and after 1 month by a hemagglutination inhibition test and a neuraminidase inhibition test, respectively. The results were compared with 35 healthy persons who received vaccine (Group III). After vaccination, antihemagglutinin (anti-HA) and antineuraminidase (anti-NA) antibody titers significantly increased in Groups I and III when compared with pre-vaccination values (ranged from 0%-5.7% in Group I and 2.9%-14.3% in Group III). After vaccination, protection rates ranged from 51.4%-74.3% and 65.7%-94.3%, respectively. In Group II, protection rates ranged from 0%-21.4%. Response rates (percentage of subjects with at least a 4-fold increase of anti-HA antibody levels) ranged after vaccination from 60% to 74.3% in Group I and 71.4% to 88.6% in Group III. In Group II, response rates were between 7.1% and 21.4%. The only significant difference in anti-HA antibody titers between Group I and Group III was found after vaccination for hemagglutinin HB where higher values were observed in Group III. In response to neuraminidase, significantly higher post-vaccination anti-N1 titers and pre-vaccination anti-NB titers were found in Group I than in Group III. Significantly higher post-vaccination anti-NB titers were found in Group III than in Group I. In Group II, anti-HA and anti-NA antibody levels were significantly lower than in Group I and Group III. The study showed that response to influenza vaccine in patients with Wegener's granulomatosis is comparable to that in healthy people.