

INFLUENCE OF VACCINATION AGAINST B VIRUS: AN ALTERNATIVE THERAPY AGAINST HEPATITIS B INFECTION IN CHILDREN

A.Radulescu, I.Bocsan, C.Rafiroiu, O.Suteu, N.Gorgan, S.Tigan

University of Medicine and Pharmacy, Cluj-Napoca

In Romania, the high levels of infection with hepatitis viruses are demonstrated by prevalence rates in young adult population: HAV-79%, HBV-31%, HCV-4,9% and HDV-1,6%. We evaluated the prevalence of infections with HBV and HCV in a dynamic child population (orphanage from Cluj, n=180 children, age 0-7 years) by making a prospective non-randomized study during 1990-1994. In June 1993 the prevalence of HBV infection was established by usual markers (EIA Murex Diagnostics) and the HBs antigen carrier state was found in 63,3% children (n=189 children); 10,1% demonstrated an evolutive course of infection evaluated by nonspecific measurements. In November 1994 the prevalence of HBV infection was 22,8% and of HCV infection, 3,42% (n=175 children). During the 4 years follow-up we demonstrated that the spread of infection was mainly through contamination of skin lesions and mucosal exposure and not by parenteral route (unpublished data). The decrease of HBV infection can be correlated with vaccination (Engerix B-3 doses). Among the children who were at least once HBs antigen positive (1993, 1994; n=56 children), we compared those who converted to a HBs antigen negative status (16) with those who remained chronic carriers (40) according to their vaccinal status (14 vaccinated). Vaccination appeared able to stop HBV infection (RR=0,33, CI=95%, Mantel-Haenszel Chi Square=16,5, p value=0,0000487, Yates corrected=14,12, p value=0,0001718); vaccinal efficiency rate 67%;

HBs antigen clearance in 71% recipients of vaccine versus 14% clearance in non-vaccinated children. Thus immunotherapy should be considered of potential importance for treatment of HBV infection in children.