Letter to the Editor

Hepatitis B vaccination and multiple sclerosis: Dilemma due to coincidence or a real tragedy?

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Dear Editor,

Vaccination against Hepatitis B was a dramatic step of progress towards the prevention of acute and chronic hepatitis B virus consequences in human beings. However, the hepatitis B vaccination underwent strong critism with hypotheses as far as its aetiological relationship with multiple sclerosis (MS) is concerned.[1]

People who had received the vaccine shots claimed to have serious adverse effects which cover a spectrum of autoimmune and nervous system disorders including rheumatoid arthritis, optic neuritis and neurodegenerative illness that resemble MS.[2,3] Moreover there is a list of more than 20,000 reports of miscellaneous adverse reactions to Hepatitis B vaccination filed with the Food and Drug Administration's (FDA's) Vaccine Adverse Event Reporting System (VAERS). In France there are data of about 600 cases of illness many with MS-like symptoms in vaccinated people.[1] The senario of molecular mimicry and the correlation with the HLA-DR2 and B7 haplotypes may suggest a pivotal role of these haplotypes through special antigen presentation which is said to happen 2-6 weeks after vaccination.[1-3] North-West Greece (NWG) is a very isolated region with a demographically homogeneous population. A retrospective study was conducted in years 1998-9 in all MS patients of this area. This study consisted of a questionnaire survey bout personal history of all previous vaccinations emphasizing on Hepatitis B vaccine. Simultaneously serum samples were taken from every patient in order to examine the hepatitis B profile.

From the list of the 141 patients with MS in NW Greece a random sample of MS patients was selected. Three women were vaccinated (3 doses into a 6-month interval) before the onset of their disease in a 3+1,5 years period. Moreover 2 women were vaccinated 1 year after the onset of MS without new relapse of the disease. Three patients had a 1-st degree relative with MS and nobody-except one-knew its serological profile of hepatitis B. Serology of all patients revealed HbsAg (+)=0%, anti-HBs=51%, anti-IgG Hbcore=38%, anti-IgM Hbcore=0%, anti-HbeAg=10%, HbeAg=0%, anti-HCV (+)=0%.

Our findings suggest that hepatitis B vaccination may not be chronically, according to the current knowledge, a triggering factor for MS in NW Greece patients as the time interval is concerned. On the other hand serology reveals that many MS patients had a previous contact with hepatitis B virus which apparently did not succed to convert them into chronic carriers.

Our point of view is that MS patients and doctors must not be afraid of hepatitis B vaccination after the onset of disease.[4]

As our experience of hepatitis B vaccine is increasing over the years, no one could refuse the criticism every vaccine should undergo despite of the fact that it is a common phenomenon of human nature to attribute cause to almost anything that precedes a tragedy like MS.

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