Lichen Ruber Planus Following HBV Vaccination

Sir,

The association of lichen planus (LP) with liver diseases, first recognized in 1978 by Rebora et al. (1), has successively been confirmed by numerous observations. In particular there are several reports of the association of this disease with chronic active hepatitis (2,3) and primary biliary cirrhosis (4). The role played by HBV infection has not yet been explained.

We report the case of a woman who developed lichen planus after an HBV vaccination. Another analogous case has already been observed by Ciaccio & Rebora (5), and this further report suggests that the association could be a causal event.

CASE REPORT

A 19-year-old woman, seronegative and at risk from hepatitis B virus infection because her father had a post-viral chronic active hepatitis, received the HBV vaccine RECOMBIVAX (Merck Sharp & Dohme, MSD). This is a non-infectant viral subunity vaccine derived from the adw subtype of HBsAg, which is produced in leaven cells. The first vaccine dose (1 ml) was given to her on the 6th of May, 1991 and the second (1 ml) a month later. In August the patient developed numerous polygonal papules, very itchy, on her ankles, and afterwards on her wrists, forearms, legs and trunk. These lesions were red, shining and flat with an elevated border. Striated whitish patterns appeared on her oral mucosa. The histologic features were typical of LP. All the routine laboratory test results were normal, as were liver function tests. HBsAg and HBeAg resulted negative, while HbsAb and HBcAb were positive.

DISCUSSION

In 1990 Ciaccio & Rebora (5) described the case of a young woman who after receiving a HBV vaccine, HEVAC B (Pasteur Institute), in three monthly doses, developed LP. This case seems to be substantially analogous to ours. Though the vaccines used were different (the former was a plasma-derived

HBV vaccine, the latter was obtained from the cell recombinant leaven), both derive from HBsAg and both induce antibody production against its epitopes. The diversity of the two vaccines also excludes the possibility that reaction, when confirmed, may be related either to plasmatic derivatives, to leaven, or to possible infective or antigenic agents. This underlines the importance of HBsAg. In both patients the time elapsed between the execution of the second dose and the appearance of the dermatosis was similar, about 40 days. Therefore the occurrence of LP does not seem a simple coincidence, but rather a consequence of the previous vaccination. The process appears to be due to an immunologic mechanism. The appearance of further cases following the more diffused use of anti-hepatitis vaccination will in all likelihood confirm a causal relationship between LP-like eruptions and anti-hepatitis B vaccination.

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