

## Graham Little-Piccardi-Lasseur Syndrome Following HBV Vaccination

Sir,

As is well established, lichen ruber planus (LRP) can be associated with liver disease (1), whereas LRP following hepatitis B virus (HBV) vaccination is an unusual, little known and still debated condition. We report here the case of a man who developed Graham Little-Piccardi-Lasseur syndrome (GLPLS) after intramuscular HBV vaccination.

### CASE REPORT

A 48-year-old man, who was at risk for HBV infection as he worked as a nurse in an emergency department, received HBV vaccine Recombivax (Merck-Sharp & Dohme, MSD). The first dose of vaccine (1 ml) was given to the patient in July 1995 and the second (1 ml) 4 weeks later. At the end of September 1995 the patient noted an eruption of numerous, polygonal, red and itchy papules localized on the trunk, limbs and wrists. No mucosal involvement was present. All routine laboratory tests results were normal, HBsAg and HBeAg results were negative while HBsAb and HBcAb were positive. The patient therefore consulted his general practitioner who diagnosed this condition as drug eruption and for which he prescribed antihistamines per os for 1 month. The condition healed in 6 weeks leaving a hyperpigmentation. Six months after the first dose the patient received the third vaccine dose (1 ml); 5 months later spinous, acuminate, follicular papules affecting the scalp occurred. In November 1996 he consulted us. The dermatological examination revealed hyperpigmented polygonal, flat papules localized on the wrists and ankles and brown spots on the lateral surface of the trunk, probably the result of previous episodes of LRP. On the scalp some cicatricial alopecic areas as well as diffuse alopecia with fine and coarse hair were present. The diagnosis of GLPLS was therefore formulated and confirmed on histological examination. The patient was treated with systemic and topical corticosteroids for 4 months, leading to healing of the hyperkeratotic papules, the alopecia still persisting.

### DISCUSSION

GLPLS is a follicular pattern of lichen planus characterized by the triad: spinous or acuminate follicular lesions, typical cutaneous or mucosal lichen planus and alopecia of the scalp with or without atrophy. These features need not be present simultaneously. Although HBV vaccination is quite a common practice, to our knowledge LRP induced by it has been reported, until now, in only 10 cases (2–8). They were all adults and they always had LRP without scalp involvement. Our case is the second induced by Recombivax (2) and the first of GLPLS, a quite rare condition more frequently observed in

females. LRP usually appears after the second vaccination, as occurred in our case, and can be induced by all 3 types of vaccine in common use: Hevac B (3), Gen Hevac B (7–8) (both produced by the Pasteur Institute) and Recombivax (produced by Merck-Sharp & Dohme). As all these vaccines share the same non-infective viral subunit S derived from HBsAg (4), we can hypothesize that this is the causal agent of LRP induced by HBV vaccination. The cutaneous reaction is probably induced by T-cell-mediated immunoreaction against keratinocytes presenting HBsAg, more specifically the S protein, as occurs in graft-versus-host reaction (5, 6). The severity of our case can be explained by the administration of the third dose despite the occurrence of LRP as a reaction to the second injection of Recombivax. This hypothesis would suggest a possible dose-dependant response of our patient to HBV vaccine, with LRP as a first sign of GLPLS.

### REFERENCES

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