

## Letter to the Editor

Sir,

The recent paper by Leegaard & Roth (1977) on allergy to horse dander allergens requires some comment. Their observation of good correlation between the clinical history and *in vivo* tests certainly does not coincide with the experience laid down in the literature (Goodale, 1916; Rackemann, 1925; Rynes, 1937; Lincoln, Bolton & Garrett, 1974). It was, and still is, common knowledge in clinical centres that positive skin reactions with horse dander extracts not related to the patient's clinical history occur quite frequently (Rudolph *et al.*, 1975; Schultze-Werninghaus *et al.*, 1976; Koers, Young & Berrens, 1977a,b). The same observation motivated Hansen (1957) to recommend extreme caution on treating such cases with therapeutic horse serum injections.

We do not know the reason for the better correlation reported by Leegaard & Roth, but it certainly cannot be the quality of the allergen, as they imply. Their experiments were conducted with an unspecified commercial extract and with an extract passed through Sephadex G-25, which is no better than the dialysed unfractionated extracts available to other investigators. The 1:100 w/v indication of stock concentration supplies no useful information. By contrast, our own experiments were conducted with horse dander protein submitted to us in 1962 by Dr D. R. Stanworth, the properties of which have been well-described (Stanworth, 1957). The whole dialysed material was fractionated with ammonium sulphate in this laboratory and kept in the lyophilized state in desiccators. The analytical data and the electrophoretic composition of this product have been put on file (Berrens, 1971; Berrens, Morris & Young, 1966). The preparation retained its full potency throughout the years and was used at the uniform concentration of 20  $\mu\text{g/ml}$  for intracutaneous tests, both in this Institute and in Paris (Berrens, Hénocq & Koers, 1974; Koers *et al.*, 1977b). The same product was used for RAST.

Although Leegaard & Roth suggest that horse dander extracts may contain irritants, no such evidence is known to us. The preparation used by ourselves did not contain irritating substances and provoked no skin reactions in control subjects. Leegaard & Roth also quote us as having suggested that skin reactions can be elicited by non-allergenic components in the extracts (Berrens *et al.*, 1974). This is an inappropriate interpretation of our data, because what we have stated is that the allergens themselves may cause unspecific positive reactions.

We feel that there are insufficient grounds for dismissing non-history-related *in vivo* reactions to horse dander allergens as being due to the quality of the allergenic extract or to the technology of investigative procedures. Rather, this well-documented

phenomenon requires detailed investigation of the precise mechanism and its possible clinical significance.

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