

Facial contact dermatitis from Xerumenex ear drops

C. E. H. GRATTAN, MRCP

Dermatological Registrar, Bristol Royal Infirmary

J. L. BURTON, BSC, MD, FRCP

Reader in Dermatology, Department of Dermatology, Bristol Royal Infirmary

Introduction

Xerumenex ear drops (Napp Laboratories Limited) containing 10 per cent triethanolamine polypeptide oleate condensate, are marketed for the removal of excessive or impacted wax. The dangers of sensitization from the repeated use of this preparation should be better known: we have recently seen three cases of facial eczema caused by Xerumenex owing to failure to comply with the manufacturer's recommendations.

Case reports

Case 1. A five-year-old boy was given daily treatment with Xerumenex drops into both ears for five days. On the sixth day, his ears became irritable and were syringed. A few hours later he developed acute and severe eczema affecting both ears, his face and his neck. The eruption subsided over a fortnight with topical and systemic corticosteroids. Some time later, patch tests to 25 per cent Xerumenex diluted in yellow soft paraffin (YSP) gave a +++ vesicular reaction. The European Standard Battery was negative.

Case 2. The 28-year-old mother of the patient in case 1 developed acute facial dermatitis the day after her son was affected. She had applied Xerumenex drops to her own ears two months earlier on a daily basis for one week. At the time, she had noticed mild irritation affecting her ears and face which had settled spontaneously. She was patch tested at the same time as her son. The diluted Xerumenex gave a ++ reaction with oedematous papules. The European Standard Battery was negative.

Case 3. A 43-year-old woman applied Xerumenex drops to both ears on three occasions over a fortnight. She developed acute and severe dermatitis of both ears, face, neck, shoulders and upper back. She, too, gave a +++ vesicular reaction to 25 per cent Xerumenex.

Discussion

The manufacturer's instructions state clearly that Xerumenex ear drops should not be allowed to remain in the ears for longer than 30 minutes before being syringed out with lukewarm water. The patients in this report failed to comply with these instructions, as the drops were instilled on more than one occasion and remained in the ear for more than 30 minutes. It is important to

note that in case 2 the patient developed facial eczema merely from instilling the drops in her son's ears, having presumably been sensitized on the first occasion when she had used the drops in her own ears.

There have been three other case reports of contact dermatitis from Xerumenex. Two patients had misused the drops by applying them for longer or more frequently than recommended.^{1,2} The third patient, an 11-year-old girl, had developed oedema of the face within six hours of using the product, and the author of the report concluded that primary sensitization may have occurred from the use of cosmetic and toilet preparations containing either oleyl polypeptide or related products.³ Cronin recorded two further cases but did not specify the clinical details.⁴ Holmes and colleagues⁵ prospectively investigated 40 patients with chronic ear diseases for contact sensitivity to externally applied medications: undiluted Xerumenex gave an irritant reaction in 11 patients and a true allergic response was seen in two patients. Further testing to the individual components confirmed the earlier finding by Boxley and Dawber¹ and Grice and Johnstone,² that triethanolamine polypeptide oleate condensate was the allergen responsible.

The fact that we have seen three cases of this sensitization in the space of six months suggests that this may be a relatively frequent reaction, the cause of which may often not be identified. Other wax-softening agents generally require repeated applications, and we believe that all general practitioners should be aware of the special hazard of sensitization to Xerumenex if the manufacturer's instructions are not drawn to the attention of the patient.

References

1. Boxley JD, Dawber RPR. Contact dermatitis to one ingredient of Xerumenex ear drops. *Contact Dermatitis* 1976; 2: 233-234.
2. Grice K, Johnstone CI. Contact dermatitis from Xerumenex. *Br Med J* 1972; 1: 508.
3. Kroon S. Contact dermatitis from oleyl polypeptide in Xerumenex ear drops. *Contact Dermatitis* 1981; 7: 271.
4. Cronin E. *Contact Dermatitis*. Pp268-269. Edinburgh: Churchill Livingstone, 1980.
5. Holmes RC, Johns AN, Wilkinson JD, *et al.* Medicament contact dermatitis in chronic inflammatory ear disease. *J R Soc Med* 1982; 75: 27-30.

Address for correspondence

Dr C. E. H. Grattan, Dermatological Registrar, Department of Dermatology, Bristol Royal Infirmary, Bristol BS2 8HW.

© *Journal of the Royal College of General Practitioners*, 1984, 34, 336.