

Sir, Inadvertent administration of Olbas oil into the eye: a surprisingly frequent presentation

A 73-year-old man presented to eye casualty with subtotal corneal epithelial loss due to the inadvertent administration of Olbas oil into his left eye, having mistaken the bottle of oil for his eye drops (Figure 1). His right eye had been enucleated many years ago due to trauma. He was considerably incapacitated, his vision being reduced to 6/36 for several days. His epithelium recovered after a week of topical antibiotics and lubricants. This incident prompted a review of similar

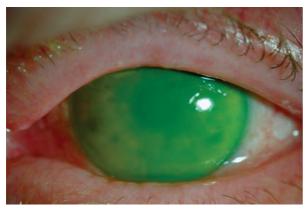


Figure 1 Extensive epithelial loss following inadvertent administration of Olbas oil.



Figure 2 The Olbas oil container closely resembles an eye drop bottle.

attendances, revealing that in the last 18 months, 12 patients were seen in the eye casualty of Bristol Eye Hospital following the instillation of Olbas oil into an eye. Olbas oil is a brand name for a liquid decongestant usually inhaled to ease cold symptoms. It consists of essential plant oils such as cajuput, clove, eucalyptus, juniper berry, levomenthol, peppermint, and wintergreen. Eye administration results in a chemical burn, probably due to the wintergreen oil, which contains $\sim 98 \,\mathrm{g}/100 \,\mathrm{ml}$ of methyl salicylate, a potent keratolytic, which causes desquamation of the epithelium. Olbas as a solution in tears was found to be pH neutral. The Olbas oil container resembles an eye drop bottle (Figure 2); six patients were recorded as mistaking Olbas for an eye preparation, most commonly Optrex. None of the patients were documented as visually impaired or confused. All made a full recovery within a week. A case report of nasal instillation of Olbas oil in a baby described severe respiratory distress, with a chemical conjunctivitis and subepithelial corneal scarring.1 Two children attended the Children's Hospital last year following ingestion of Olbas oil. As a 'natural' product, it may be more likely to be used unconventionally and less likely to be stored safely out of children's reach than conventional medicines. We found one other report of ocular administration of Olbas oil.2 The authors proposed pharmacists should warn patients not to store it near eye drops to avoid confusion. We suggest the manufacturers of Olbas oil change the bottle to a dropper pipette design, which could not easily be confused with standard eye drops.

References

- 1 Wyllie JP, Alexander FW. Nasal instillation of 'Olbas Oil' in an infant. Arch Dis Child 1994; 70(4): 357–358.
- 2 Haylor V, Daines J. Olbas oil mistaken as eye drops. Letter. Pharm J 2004; 272: 670.

MKM Adams¹, JM Sparrow¹, S Jim² and DM Tole¹

¹Department of Ophtalmology, Bristol Eye Hospital, Lower Maudlin Street, Bristol, UK ²School of Chemistry, University of Bristol, Bristol, UK E-mail: madeleine.adams@virgin.net

Eye (2009) **23,** 244; doi:10.1038/eye.2008.70; published online 11 April 2008