

LETTERS TO THE EDITOR

Cyanoacrylate adhesive mistaken for ear drops

EDITOR,—We read with interest the paper of McLean¹ and wish to report that although there have been a several published reports of accidental instillation of cyanoacrylate adhesive into patients' eyes, this potential hazard also applies to inadvertent application to the ear.

CASE REPORT

A 35 year old man presented to the accident and emergency department, having mistakenly instilled approximately four drops of cyanoacrylate adhesive ("Superattak") into his left ear from a bottle that he had assumed contained ear drops ("Otex"). Following the administration he felt an immediate burning sensation in the ear and an associated loss of hearing. On examination his left external auditory canal was completely occluded with the hardened glue. This was successfully removed without recourse to analgesia, but it was a lengthy procedure. Subsequent examination including formal audiometry of the affected ear was normal, and the patient was discharged with advice. To date there have been no adverse sequelae.

COMMENT

Cyanoacrylate adhesive undergoes a rapid anionic polymerisation in the presence of basic substances and therefore forms a strong bond in seconds.² This can be particularly hazardous in areas such as the eyes and ears following accidental instillation. Figure 1 shows the similarities between the ear drop and adhesive containers. The adhesive containers do carry warnings about the risk of skin and eye contact, but we suggest that measures should also be taken by the manu-

facturers to alter the shape or type of adhesive containers on the market, or that they should have a childproof type of cap in an effort to minimise the risk of this preventable hazard.

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Local infections at cannula site

EDITOR,—Most patients admitted to hospital from the accident and emergency (A&E) department have a peripheral venous cannula sited for administration of fluids and medications. In our hospital all inpatients have a transparent polyurethane film (OpSite IV3000) used as the intravenous cannula dressing, whereas in the A&E department an elastic adhesive tape is used to secure cannulae. This elastic adhesive tape is usually left in place until the cannula is resited or removed. Cannula related septicaemias are the most frequent life threatening complication of intravenous therapy. Most cannula related septicaemias begin as local infections of the cannula site.²

We compared local infections of the cannula site with elastic adhesive tape and OpSite IV3000. Over a two week period all patients cannulated in the A&E department were randomised to have elastic adhesive tape or OpSite IV3000. In all cases the skin was cleaned first with 70% isopropyl alcohol. All

the discharged patients had the dressing and cannula removed before leaving the department. Every patient, including those discharged, had their cannula site inspected two days following insertion of the cannula. Eighty five patients were treated with elastic adhesive tape and 63 with OpSite IV3000. Of the 85 patients treated with elastic adhesive tape, 49 were admitted and 36 were discharged from the A&E department. Of the 63 patients treated with OpSite IV3000, 43 were admitted and 20 were discharged from the A&E department. Two of the patients treated with elastic adhesive tape admitted to hospital developed phlebitis. None of the patients treated with OpSite IV3000 developed phlebitis. The diagnosis of phlebitis included two or more of the following symptoms or signs: tenderness, erythema, swelling, purulence, or a palpable venous cord.³ No patients treated by either method developed cannula related infections as diagnosed by a positive culture of the cannula tip, although the above two patients were given antibiotics following the diagnosis of phlebitis.

OpSite IV3000 is highly permeable to air and moisture vapour and therefore produces significantly lower levels of skin colonisation when compared to other intravenous dressings.⁴ It is also transparent, allowing inspection of the cannula site, and provides better security of cannula fixation, and easier application and removal.⁵ However, it is four times more expensive than elastic adhesive tape currently used by our department. We would suggest that OpSite IV3000 may be useful in A&E patients who are admitted. Its use in all A&E patients is probably not justified.

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How safe are schools?

EDITOR,—I think Simon Carley and Polly Terry¹ have misinterpreted conclusions in the paper by Maitra and Sweeney.² Nowhere do the authors claim that injuries incurred by children at school are more serious than those they incur in public places. The point of the short analysis of injury severity is to demonstrate that the school injuries are no less severe—that is, a very similar percentage of



Figure 1 The adhesive (left) and the ear drop containers (right) are very similar