CORRESPONDENCE

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- *No letter should be more than 400 words.*
- *For letters on scientific subjects we normally reserve our correspondence columns for those relating to issues discussed recently (within six weeks) in the BMJ.*
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- *Because we receive many more letters than we can publish we may shorten those we do print, particularly when we receive several on the same subject.*

Superglue inadvertently used as eyedrops

SIR,—Over a period of nine months we have treated six patients who presented to the casualty department of Moorfields Eye Hospital having inadvertently instilled cyanoacrylate nail adhesive into their eye. The case histories are summarised in the table. The bottles for nail glue and Murine or Optrex were of similar size and colour. The name of one of the nail adhesives (Eylure) was a further confusing factor.

Patients who inadvertently used cyanoacrylate nail adhesive as eyedrops

Case No	Age (years)	Sex	Product instilled	Intended to use	Ocular injury	Time to resolution
1	23	F	Elegant Touch	Optrex	Abrasions	3 Days
2	47	F	Elegant Touch	Optrex	Abrasions	Lost to follow up
3	38	F	Elegant Touch	Optrex	Abrasions	2 Days
4	35	F	Elegant Touch	Optrex	60% Abrasion	5 Days
5	27	F	Eylure	Murine	Punctate epitheliopathy	2 Days
6	27	F	Eylure	Murine	Punctate epitheliopathy	4 Days

The patients invariably described intense burning or stinging pain following instillation. As the glue hardened within the conjunctival sac and the lids adhered to each other there was contact between this foreign body and the corneal surface. This resulted in corneal and conjunctival epithelial abrasion and punctate epithelial keratopathy.

All patients responded well to removal of the glue and to treatment with mydriatics and topical antibiotics. They made an average of two follow up visits to the casualty department. No serious complications were recorded in this series.

There have been reports of inadvertent ocular instillation of superglue[1,2] and also of other non-pharmaceutical substances[3,4] over the past 13 years. In many cases superglue was mistaken for antibiotic, anti-glaucomatous, or other therapeutic preparations. The inadvertent instillation of superglue into the ear has also been recorded.[5]

The design of glass bottles containing medications for ocular use is governed by British Standard regulations.[6] No such guidelines exist for the design of plastic bottles.

It is important that therapeutic drops should be easily distinguished from other, possibly noxious fluids (figure) as many patients using regular topical ocular medications are poorly sighted. Morgan and Astbury suggested in 1984 that the sale of non-pharmaceutical chemicals in plastic dropper bottles should be banned.[2] This has not, however, been taken up.

Misuse of topical medications resulting from inadvertent interchange of bottle caps has been reported.[7] Labelling the underside of medication bottles in Braille has also been suggested to help partially sighted patients to distinguish their medications.[8]

A distinctive shape of bottle and cap for solutions to be used in the eye would make discrimination easier for all, including partially sighted and blind patients. Each class of drop should also have its own colour for label and cap—for example, blue for β blockers, red for mydriatics.[9] This change would reduce the incidence of this unnecessary, painful, and potentially sight threatening problem. It should be supported by appropriate legislation.

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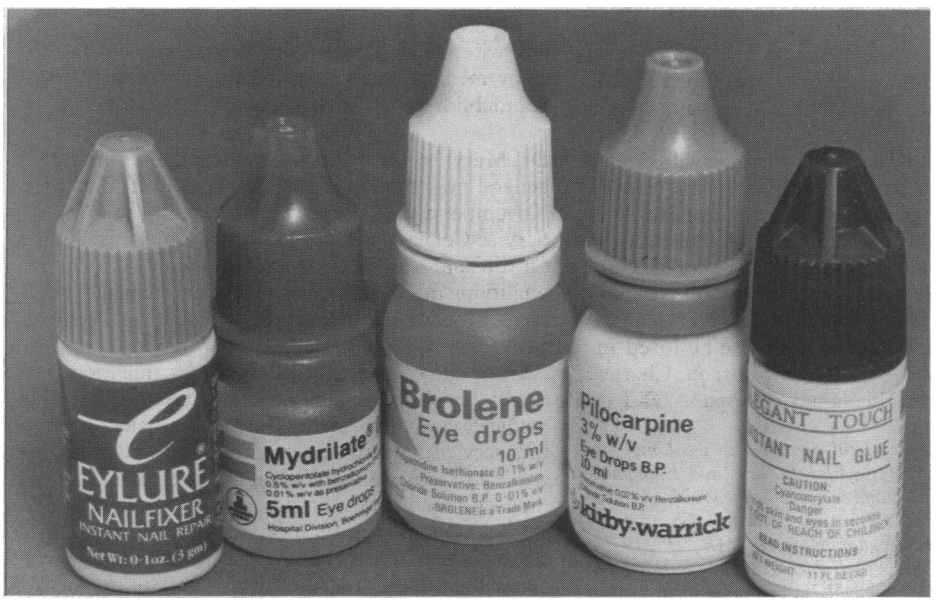

Similarity of bottles containing nail glue and ocular preparations

Alteration in diabetic control after a change in insulin manufacture

SIR,—Novo Nordisk laboratories have recently changed their method of manufacturing human insulin from the enzymatic modification of porcine insulin (emp) to a technique using genetically engineered yeast (pyr). This change has not been announced. I wish to report on a diabetic patient who had hypoglycaemia after changing to human (pyr) insulin.

A sensible and articulate qualified nurse developed diabetes in 1979 at the age of 33. After treatment with porcine insulins manufactured by Novo her treatment was changed to Novo human (emp) insulins twice daily in 1987 and soon after this was converted to the NovoPen regimen. Her overall control was excellent with glycated haemoglobin concentrations within the normal range, and hypoglycaemic reactions were rare. She had two successful pregnancies after diagnosis.