Lomotil in diarrhoeal illnesses

Sir,

The article by Curtis and Goel (*Archives*, 1979, **54**, 222) prompts me to place the usage of Lomotil in young children in the tropics in its right perspective. The problems of diarrhoea in the tropics are quite different when compared with temperate climates, and management of this condition is therefore also different.

In situations where children have little or no access to optimal therapeutic management, especially fluid therapy, symptomatic control of diarrhoea does become important and it is in this context that I find little objective evidence for Curtis and Goel to draw a general conclusion that the use of Lomotil is difficult to justify in children.

In their study only 6 of 45 patients had actually been prescribed Lomotil for a diarrhoeal illness, of which 4 took an accidental overdose. The remaining 39 children had ingested large quantities of the drug accidentally without any indication for its use, when adult relatives had been prescribed the drug. The authors state that no correlation was found between severity of symptoms and dose ingested, but the upper limits of dose range in their paper show that in the mild, moderate, and severe cases the quantity of drug ingested was 23 times, 33 times, and 40 times the therapeutically recommended dose.

Some time ago we were equally concerned about the use of Lomotil and so we conducted a dose response study in children suffering from nonspecific and specific diarrhoea (Karan *et al.*, 1976), using Lomotil in a dosage range of 0.2 to 0.3 mg/kg, and observed that the optimal dose for Indian children appears to be about 0.25 mg/kg. Furthermore, when used in this therapeutic dose there were no significant side effects or signs of toxicity, although children taking 0.3 mg/kg did have slightly more side effects, but these were not statistically significant.

I feel that Lomotil does have a role in managing diarrhoea in the tropics if used judiciously, but problems can arise if the correct dose is not given. Accidental overdosage can of course occur with any drug.

References

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Sir,

This letter is in response to the paper by Curtis and Goel (*Archives*, 1979, **54**, 222). While I agree that there is a need to monitor Lomotil therapy in young children closely, our experience with this drug in this country does not justify their conclusions.

Curtis and Goel state that in only 13% (6 out of 45) cases was Lomotil actually prescribed for a diarrhoeal illness, and in the remaining 87% a large quantity of the drug was ingested by small children, where the drug was

not prescribed primarily for them. Even in the former group, 4 of the 6 cases had an accidental overdose.

Bovier-Lapierre *et al.* (1973), Scorza *et al.* (1974), and Wasserman (*Journal of the American Medical Association*, 1974) clearly differentiate the incidence of intolerance and intoxication. Although the former can occur with lower doses in children who are hypersensitive to the drug, the total incidence of such effects is relatively low compared with the intoxication effects seen after accidental ingestion of large doses and this is very much a dose-related effect. It surprises me that Curtis and Goel do not think this is so, because the upper limits of the dosage range in their own data are 5.8, 8.4, and 10 mg/kg respectively, in the mild, moderate, and severe cases, compared with the therapeutic dose of 0.25 mg/kg.

Morbidity and mortality from diarrhoea in the tropics is such that rapid control of diarrhoeal symptoms becomes mandatory and the rationale of management becomes slightly different from the one seen in other parts of the world. It is in such a setting that we evaluated the role of Lomotil in diarrhoea in children below 2 years (Limaye, 1979); we found that the judicious use of this drug did not result in any undue toxicity.

Lomotil is certainly no panacea for diarrhoea but it does offer the paediatrician, at least in the tropics, a useful mode of speedy correction of diarrhoeal symptoms. However, we agree with Curtis and Goel that when prescribed for adult relatives, the drug should be kept out of reach of children.

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Dr Goel comments:

It was certainly not our intention to exclude the use of Lomotil as an antidiarrhoeal agent in children in the tropics. No doubt all who treat such children would agree that the mainstay of treatment of diarrhoea in children in any part of the world is the correction of fluid, electrolyte, and acid-base status, and not the reduction of intestinal motility by an antidiarrhoeal agent. If, as suggested by Dr Karan, such therapeutic measures are not available,