References
7 Berman HM, Jeffery GA, Rosenstein RD. The crystal structures of the $\alpha$ and B forms of D-mannitol. Acta Cryst 1968; B24: 442–49.

Peptic ulcer and non-steroidal anti-inflammatory agents
SIR.—I was most interested in the recent case control study by Duggan et al (Gut 1986; 27: 929–33) confirming an association of non-steroidal anti-inflammatory agents (NSAIAs) with gastric ulcer in Australia. I note that no less than 42% of the cases presented with haemorrhage, and wonder whether comparison of this group with the remainder would add anything to the conclusions. British studies have shown a significant association of NSAIAs with haemorrhage from gastric ulcer in the elderly1 3 and also with ulcer perforations.4 Although it might seem logical that if an agent causes ulcers to bleed and perforate it could also cause an ulcer in the first place, this problem is far from simple – especially as we do not know how gastric ulcers begin. If, for example, they can arise from gastric erosions, why are they usually single and why do they not follow mucosal biopsies?

If the authors found that NSAIA ingestion was related to symptomatic non-bleeding ulcers, this would be valuable information. Unfortunately it still would not solve the question of cause, as so many ulcers are symptomless and/or undiagnosed,5 6 especially in the elderly7 who are the chief users of these agents.

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References

Reply
SIR.—We thank Dr Montgomery for his comments about a possible difference between bleeding and non-bleeding ulcer. For bleeding ulcers there were nine pairs in which one member took NSAIAs regularly and the other none at all; seven were patients and two controls giving an odds ratio of 3·5. In the nine non-bleeding such pairs, eight were patients and one was a control (OR=8).

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