Reply

SIR.—We are grateful to Dr Arnold for raising the role of antibiotic prophylaxis in patients with common bile duct (CBD) stones requiring endoscopic sphincterotomy (ES).

The issue (prophylactic mezlocillin *versus* cephalosporin) is, however, not as clear cut as might at first appear. The following are important and interrelated points that have to be considered: (1) The Leicester and Manchester ES series are based on different groups of patients. In the Leicester series referrals from outside of Leicester were deliberately excluded in order to reduce bias, allowing comparison with Leicester surgical patients; in other words restricting our study to a closely defined patient population. The Manchester ES series was based on patients referred from the North West of England and North Wales. If we were to include referrals from outside Leicester, we would have had to include more than 200 additional patients during the same study period. These overall results would then look more like the Manchester series. (2) The number of patients with one or more septic complications was 14 (13.2%) – this was not clear in our text. We used rigid criteria to determine this and this figure may not be directly comparable with other series, particularly those involving referrals from outside the local catchment area. (3) There has been no rigid policy about antibiotic prophylaxis and ES in Leicester, but there has been a major switch to iv cefuroxime in recent years. Patients with acute cholangitis were treated by combination therapy which usually included iv gentamicin.² Development of post-ES cholangitis ± septicaemia led to institution of combination chemotherapy. (4) Most organisms in the biliary tree will be covered by cefuroxime; the problem of pseudomonas spp³ may have more to do with inadequate disinfection of the instruments. The important finding in this study was that ERCP/ES resulted in more patients with infected gall bladders; pseudomonas spp was just one component of this. (5) Post-ES complications have been found to be independently correlated with medical risk factors and the level of serum bilirubin (multivariate analysis).⁴ Both these factors were significantly greater in the Leicester compared with the Manchester ES series. (6) Although there was no statistically significant difference in the incidence of acute cholangitis between the Leicester and Manchester ES series there were more in the former (29/106 cases *versus* 15/81 cases). The incidence of septic complications post-ES (cholangitis and empyema of the gall bladder) in Leicester was higher in those presenting with cholangitis.

For the above reasons we are not entirely convinced that mezlocillin should be used as the routine prophylactic agent. What is certain is that all patients

should be treated along 'surgical lines' before ES, including iv fluids and appropriate antibiotics. In the case of acute cholangitis being present before ES, or developing afterwards, broad spectrum iv antibiotic therapy should be used to include cover against pseudomonas spp. What seems crucial is that CBD clearance or drainage⁵ should be achieved *ab initio*.

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Mixed endocrine adrenal tumour causing steatorrhoea

SIR.—Thesleff *et al* have recently described a mixed endocrine and renal tumour causing diarrhoea which was dramatically improved during α adrenoreceptor blockade with phenoxybenzamine.¹ This was thought to be because of inhibition of catecholamines which had been suppressing exocrine pancreatic secretion.² We recently have seen a 42 year old man with a two year history of watery diarrhoea who was found to have an adrenal pheochromocytoma secreting catecholamines and vasoactive intestinal peptide (VIP). Before surgery he was routinely given phenoxybenzamine and propranolol resulting in immediate cessation of his diarrhoea. In this case we believe the mechanism for his response may be due to the beta adrenoreceptor blockade and not alpha adrenoreceptor blockade.