

among IBS patients without necessarily indicating psychiatric disorder. A more conservative estimate of depression among Rose *et al*'s patients would therefore use a cutoff point of 8 or more, which would greatly reduce the overall prevalence of depression from their figure of 50%.

Rose *et al* compared their results with those of Macdonald and Bouchier⁶ who did use a standardised interview before making a psychiatric diagnosis. These workers found that only 20% of their sample had depression (in 16% it was rated as severe); a further 22% had anxiety (which is not measured by the Di-Beck). Among the non-organic group the figures were 25% for depression and 22% for anxiety. The other studies quoted in our review paper suggest that these are much more accurate figures than those produced by the Rose *et al*'s method.

We applaud Rose *et al*'s attempts to highlight the prevalence of depressive illness in general medical and gastrointestinal patients, and agree completely with the view 'that early diagnosis of psychiatric disorder . . . may lead to a shorter period of illness'. One of the main points of our review article however, was that the research instrument and the cutoff points must be chosen with extreme care, otherwise the prevalence of psychiatric disorder will be overestimated.

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References

- Rose JDR, Troughton AH, Harvey JS, Smith PM. Depression and functional bowel disorders in gastro-intestinal outpatients. *Gut* 1986; **27**: 1025–8.
- Peck DF, Dean C. *Measurement in Psychiatry*. Chapter 13. Companion to Psychiatric Studies. 3rd ed. Edinburgh: Churchill Livingstone, 1983.
- Goldberg DPG. Identifying psychiatric illness among general medical patients. *Br Med J* 1985; **291**: 161–2.
- Clark DC, Cavanaugh S, Gibbons RD. The core symptoms of depression in medical and psychiatric patients. *J Nerv Ment Dis* 1983; **171**: 705–13.
- Mayou R, Hawton K. Psychiatric disorder in the general hospital. *Br J Psychiatry* 1986; **149**: 172–90.
- MacDonald AJ, Bouchier IAD. Non-organic gastrointestinal illness: a medical and psychiatric study. *Br J Psychiatry* 1980; **136**: 276–83.

Continuous oesophageal pH-monitoring

SIR.—We were very interested in the recent article by McLauchlan and coworkers¹ comparing different

electrodes for 24 hour pH monitoring. This study shows very clearly better results obtained with glass electrodes compared with antimony electrodes and also the differences obtained when different electrodes are used. We prefer to use glass electrodes with a remote skin reference electrode because of the very small external diameter (1.6 mm; Microelectrodes Inc. M 506), as we are especially interested in infants younger than four months. In our opinion the paper by McLauchlan stresses the necessity to establish normal physiological ranges of gastroesophageal reflux for each group of patients, or for each technique. The physiological incidence of gastroesophageal reflux will be different according to the position,² and age³ of the infants. In infants, results will be dependent on the formula administered to the infant,⁴ with or without milk thickening agents.⁵ The type of material used for registration (continuous, one measurement stored in a memory every 5, 7.5 seconds, or every minute), and the pH electrode¹ used are of course other factors that can influence the data. We would like to stress the necessity for each team to establish normal ranges for their method and for their population data considered as within physiological ranges for a six month old infant investigated with a glass electrode with a remote reference electrode can be 'pathological' for a one month old baby investigated with a glass electrode with a combined sensing and reference electrode.

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References

- McLauchlan G, Rawlings JM, Lucas ML, McCloy RF, Crean GP, McColl KEL. Electrodes for 24 hour pH monitoring – a comparative study. *Gut* 1987; **28**: 935–9.
- Vandenplas Y, Sacre L. Seventeen hour continuous esophageal pH monitoring in the newborn: evaluation of the influence of position in asymptomatic and symptomatic babies. *J Pediatr Gastroenterol Nutr* 1985; **4**: 356–61.
- Vandenplas Y, Sacre L. Continuous 24 hour esophageal pH monitoring in 285 asymptomatic infants 0–15 months old. *J Pediatr Gastroenterol Nutr* 1987; **6**: 220–4.
- Vandenplas Y, Sacre L, Loeb H. Effect of formula feeding on gastric acidity time and esophageal pH monitoring data. *Eur J Pediatr* (in press).
- Vandenplas Y, Sacre L. Milk-thickening agents as a treatment for gastroesophageal reflux. *Clin Pediatr* 1987; **26**: 66–8.