

parity, social class, or medical history in common.

All the molar pregnancies were conceived after the severe drought of last summer and it is known that the nitrate concentration in the drinking water in this area rose significantly at the time.¹ Nitrates have been implicated in methaemoglobinaemia in neonates and in gastric carcinoma in adults, but neither they nor any other constituent of drinking water are known to promote the development of trophoblastic tumours.

I wonder whether any other areas have experienced a similar increase.

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¹ Dewhurst, C J, in *Integrated Obstetrics and Gynaecology for Postgraduates*, 2nd edn, p 253. Oxford, Blackwell Scientific, 1976.

² Carr, D H, *Obstetrics and Gynaecology*, 1966, 33, 333.

³ Carr, D H, *Lancet*, 1967, 2, 830.

⁴ Wild, A, *Nature*, 1977, 268, 197.

Preventing prematurity in twins

SIR,—In your leading article on this subject (25 June, p 1618) you say that "there seems to be no effective prophylaxis that can be offered to women expecting twins." You say further that no study of the use of β -sympathomimetic drugs in twin pregnancies has been reported. You do not refer to Continental studies—for example, the trials which began in Germany in 1972 and which were reported to the annual meeting of the German Society for Gynaecology in Wiesbaden in September 1974. Only 80 cases were reported, but up to that time no undesirable side effects had been reported in these trials. There were four perinatal deaths but in all four cases the twin pregnancy was diagnosed only after the beginning of labour. The paper concluded: "By a combination of bed rest and the use of β -sympathomimetic drugs it is possible to achieve a lengthening of gestation and a reduction in the incidence of preterm birth and perinatal mortality, doubtless as a consequence of the better perfusion of uterus and placenta."¹

The prophylactic use of the β -sympathomimetic drugs is stated now to be a central feature of the management of twin pregnancies in West Germany and also in East Germany.² The drug used for prophylaxis is in oral form. The German experience of the use of these drugs for preventing preterm birth now covers 10 years, but the results as published of German trials in twin pregnancies are not adequate and are no substitute for British trials.³

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¹ Scholtes, G, *Archiv für Gynäkologie*, 1975, 219, 337.

² Sachs, H, and Kühl, H O, *Zentralblatt für Gynäkologie*, 1977, 99, 552.

³ Wynn, M, and Wynn, A, *The Prevention of Preterm Birth*. London, Foundation for Education and Research in Childbearing, 1977.

Campylobacter enteritis

SIR,—We were interested in Dr M B Skirrow's account of campylobacter enteritis (2 July, p 9). We have been using Dr Skirrow's selective medium for the past three months and find that campylobacters similar to those described by him are prevalent in the Epsom area. Campylobacters were isolated from 19 (5.8%) of 330

faecal specimens from patients giving a history of diarrhoea and from only 1 of 120 specimens from patients without diarrhoea.

We confirm that abdominal pain is a common feature of the illness, and in one girl aged 11 years it resulted in admission to hospital and appendicectomy. She developed diarrhoea after operation and a profuse growth of campylobacters was obtained from her faeces. No abnormalities were found at operation and her appendix was histologically normal.

Two points of practical importance have emerged in our laboratory. Firstly, it is important to examine fresh specimens of faeces or to refrigerate the sample if there is likely to be delay. Aliquots of seven positive faecal specimens were kept at room temperature and at +4°C. After 24 hours' storage at room temperature two out of seven samples failed to yield growths of campylobacter on direct plating and only one out of seven remained positive after 48 hours' storage. All the samples kept at +4°C for 48 hours remained positive.

Secondly, alkaline peptone water (pH 8.4) incubated at 43°C in an atmosphere of 5% oxygen, 10% carbon dioxide, and 85% hydrogen appears to be a satisfactory enrichment medium. Preliminary investigations showed that it supported the growth of a small inoculum of campylobacters (1-10 organisms) and allowed campylobacters to multiply in the presence of much larger numbers of *Escherichia coli* and *Streptococcus faecalis*. Two samples of faeces which were negative on direct plating yielded campylobacters after enrichment in alkaline peptone water and subsequent plating on selective medium.

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Plasma drug levels on once-daily dosage

SIR,—Previous correspondence (Drs A J Marshall and D W Barritt (14 May, p 1278) and Dr D A Persoff and Miss Elaine Mason (9 July, p 125)) has suggested that once-daily drug dosage may lead to better compliance. Although the plasma steady-state levels achieved may apparently be similar with once-daily and divided-dose regimens, considerable fluctuation of plasma drug concentration may occur between doses and it cannot be assumed that the therapeutic effects will be the same.

As part of a larger study we have recently examined¹ between-dose plasma level profiles of nortriptyline in the same subjects after receiving either a three-times-daily nortriptyline preparation (10 mg nortriptyline, 0.5 mg fluphenazine) or a once-daily preparation (30 mg nortriptyline, 1.5 mg fluphenazine). With each preparation the plasma level studies were carried out after seven days' medication. Although the two preparations gave similar before-dose plasma nortriptyline levels in the individuals studied, once-daily dosing produced a slow peaking effect in five out of six subjects which was not evident on the three-times-daily regimen. In two subjects the nortriptyline concentration increased after four hours to a maximum of 300% of the pre-dose concentration.

Routine monitoring of plasma nortriptyline levels has recently been advocated by Dr S A Montgomery and others (16 July, p 166), who provided further evidence that plasma nor-

triptyline concentrations above about 150 $\mu\text{g/l}$ inhibit recovery. In the light of our findings single sampling for determination of so-called "steady-state" concentrations may not be appropriate with once-daily regimens, and studies of peak levels between doses may be required in addition to reveal the full implications of a change to a once-daily dose regimen. Furthermore, lower than customary doses of a tricyclic antidepressant, if given once daily, may be adequate for many patients since peak plasma concentrations within the recommended steady-state therapeutic range may be sufficient to produce a satisfactory antidepressant effect. This would avoid the risk of a poor response, as well as toxicity, associated with the high steady-state plasma concentrations, which Dr Montgomery and his colleagues found in 61% of their patients on standard doses of nortriptyline.

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¹ Stevenson, I H, and Schiff, A A, *Neuropharmacology*. In press.

Hygiene in NHS hospitals

SIR,—We were interested to see Dr G A J Ayliffe and Mr B J Collins's further letter (2 July, p 48) on this topic as their position now seems even more isolated. The Department of Health and Social Security has just issued HC(77)24 which reminds health authorities that they should comply with the provisions of the Food Hygiene (General) Regulations 1970 and that environmental health officers should be given "open access" to catering departments and food handling areas in health premises. The DHSS says that recommendations contained in environmental health officers' reports should be immediately considered for appropriate action.

Furthermore, the BMA at the recent Annual Representative Meeting resolved that crown property should be included within the scope of all public health regulations.

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Training programmes

SIR,—Commenting generally, your leading article on medical genetics (30 July, p 279) pointed out the worrying trend in British medicine caused by "the rigidity of the training programmes which have been set out by the royal colleges." You state that they are supposed to be flexible but they may be destroying the ability of young doctors to pursue their career in an unorthodox way.

This view is shared by very many people and in fact many physicians would like to see the whole concept of training programmes abolished. Those of us with considerable experience in training and advising aspiring consultants feel that the whole exercise in drawing up training programmes has been unnecessary