with patients being followed up who would be just as well managed by their general practitioners—who are responsible for their care for the rest of the time anyway. And, who knows, if the consultant returned to true consulting practice the standards of treatment of rheumatoid arthritis in his GP colleagues' practices might just possibly improve.

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¹ Hodgkin K. *Towards earlier diagnosis*. Edinburgh: Churchill Livingstone, 1958.

² Mowat AG, Nichols PJR, Hollings EM, Haworth RJ, Aitken LC. *Ann Rheum Dis* 1980;39:12-7.

Perinatal and neonatal mortality

SIR,—I would like to congratulate Mr R Garry and A F J Atkins (23 August, p 562) on the organisation of the maternity services in their area. The basic principles of hospital delivery and immediate return home where there were no clinical or social contraindications were laid down by Dr Sarah Walker and myself in 1956.¹ Although this received wide publicity at the time, such is our innate resistance to new ideas that it took Professor Duncan over seven years to establish such a unit in Cardiff. This was followed a few years later by Salford, and no doubt similar facilities exist elsewhere.

I have subsequently developed my ideas and now feel that it can no longer be argued that midwifery is part of ordinary general practice. I would like to have the obstetric list restricted to a relatively few dedicated general practitioner obstetricians, who with the midwives, district or hospital, would be part of the maternity team under the consultant of their choice. They would be GPs for, say, three days a week and general practitioner obstetricians for the other days. All deliveries would be in hospital with immediate discharge home where suitable. All antenatal care would be given in the health centre by this same team, the consultant coming out on special sessions in difficult cases to assess the risk. Transport of the mother in labour would be relatively easy in most of this country, but in very remote areas what is wrong with using helicopters?

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¹ Sluglett J, Walker S. *Lancet* 1956;i:684-6.

Anastomotic integrity after operations for large-bowel cancer

SIR,—The figures on anastomotic leakage given by Mr L P Fielding and others (9 August, p 411) are interesting and important. However, it would be a pity if surgeons were to interpret a leakage rate of 25% for tumour resection performed in the presence of obstruction when there was a protecting colostomy, compared with only 14% where this was not employed, as a condemnation of a relieving colostomy in this situation.

Two factors may account for these rather surprising figures. Firstly, we are not told how many resections in the unprotected group were obstructions due to right-sided cancers, where a relieving colostomy would not, in any case, be indicated. Secondly, we are not informed of the severity of the obstruction; a surgeon might resect a minimally obstructed "easy" case without a colostomy but might protect a really nasty occlusion by this means

and not be too surprised if the leakage rate was higher in the second category.

Until there is more news, I shall continue to protect left-sided anastomoses performed in obstructed cases of colonic cancer by means of a transverse colostomy.

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* * * We sent this letter to Mr Fielding, who replies below.—ED, *BMJ*.

SIR,—Thank you for asking me to reply to Professor Ellis's letter. In the group of patients undergoing anastomoses with stoma (127 patients), 32 had tumours up to the splenic flexure (right-sided lesions), of whom five (15.6%) died in the postoperative period. Thus the remainder of this group (95 patients) had obstructed lesions of, or distal to, the splenic flexure, of whom 14 (14.7%) died. In the other two comparative groups the figures were: anastomoses with transverse colostomy—28 patients, of whom six died (21%) and delayed anastomoses—29 patients, of whom one died (3%). I note that Professor Ellis makes no mention of this last group—the data suggest that it is this policy which might be achieving the best results—but I agree with him that we need information about the comparability of patients in these three groups for the degree of obstruction and severity of illness.

Sadly, there are no yardsticks by which these factors can be measured. In the past I have attempted to provide some information by using a clinical score and recording the delay from admission to surgery.¹ It seems that a choice of a transverse loop colostomy to accompany a left-sided obstructive resection after an anastomosis has been constructed is one of personal clinical bias—as indeed it seems to be for Professor Ellis—but that a decision to delay an anastomosis is different. Here it seems that clinical severity is greater than in the other two groups, and that surgeons, accepting the principle of immediate tumour resection, have been unwilling to risk an anastomosis. Taken in this context, the outcome for this group is interestingly good. In summary then, my overall clinical view depends on two levels of assessment by the surgeon—firstly, of his own ability to construct a secure anastomosis and, secondly, of the degree of the patient's sickness.

Thus, on the assumption that a fully trained surgeon is present for all of these operations, a resectable tumour should be resected after bowel decompression.¹ Then, if the patient is relatively unfit or has "significant" systemic effects from the obstruction or if the bowel wall is friable, an anastomosis should be delayed and the ends brought out as stomas. I believe that this policy should be used for both left and right-sided lesions (in the case of a distal tumour in which a mucous fistula is not possible then the end can be oversewn—a Hartmann procedure). Alternatively, if conditions are more favourable and if the surgeon is certain that he has a low rate for anastomotic leakage, then reconstruction should be considered: an ileocolic anastomosis for lesions up to and including the splenic flexure (or even beyond) and a colorectal anastomosis for tumours of the sigmoid after "on-table" orthograde colonic and distal rectal irrigations.² The combination of which allows reconstruction between clean and empty segments of gut. Neither of the policies just described includes the construction of a transverse loop colostomy.

Currently these views may seem unconventional. However, over the last decade we have seen a shift in our approach to the management of patients with large gut obstruction, in that immediate tumour resection is far more widely practised than formerly,¹ when staged tumour

resection was the order of the day. We now need to turn our attention to the timing and methods of reconstruction in relation to the factors just listed, accepting two principles: firstly, that right hemicolectomy for bowel obstruction with immediate reconstruction is not the simple uncomplicated operation once thought^{1,3} and, secondly, that transverse loop colostomy is of unproved value to militate against the septic complications of a leaking left-sided anastomosis.

Clearly, these are not subjects suitable for an orthodox randomised trial⁴ and we will need to proceed slowly on the basis of discussion and reporting of results to establish the most effective treatments. In the meantime it would be helpful for us to stop using the words "protecting" or "relieving" to qualify the procedure of transverse loop colostomy until such time that this function has been established; my guess is that we will not be able to find such evidence. Even if these thoughts do not constitute the "news" sought by Professor Ellis, perhaps the small amount of evidence supplied will cause him to reconsider again the role of concomitant transverse loop colostomy.

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¹ Fielding LP, Stewart-Brown S, Blesovsky L. Large bowel obstruction caused by cancer: A prospective study. *Br Med J* 1979;ii:515-7.

² Anonymous. *Br Med J* 1980;280:882-3.

³ Fielding LP, Stewart-Brown S, Dudley HAF. *Lancet* 1978;ii:778-81.

⁴ Debas HT, Thompson FB. *Surg Gynecol Obstet* 1972;135:747-52.

Unprocessed bran in idiopathic hypercalciuria

SIR,—In their brief article on the effect of unprocessed bran on urinary calcium excretion in idiopathic hypercalciuria, Mr P J H Shah and others (9 August, p 426) identify three possible mechanisms: the binding of calcium to phytic acid; prevention of calcium absorption by bran; or decreased intestinal transit time reducing the time available for calcium absorption. A fourth possible mechanism merits discussion.

Vaughan and Filer¹ reported that lactose and certain other sugars increase calcium absorption from the gut; Hodgkinson and Heaton² showed that a carbohydrate meal increases calcium excretion without producing any change in plasma calcium level; and Leman *et al*³ found that subjects prone to develop stones in the renal tract tend to exhibit bursts of hypercalciuria after ingesting carbohydrate-rich foods. Many other papers in the scientific literature indicate that calcium is absorbed along with monosaccharides. If absorption of the latter is complete in the jejunum then little calcium is absorbed lower down the gastrointestinal tract, but if for any reason disaccharides or more complex carbohydrates are not broken down to absorbable monosaccharides until food reaches the ileum or large bowel, absorption of calcium may take place over a much longer stretch of the intestinal tract and consequently overall calcium absorption may be excessive. In the rat it is easy to produce various forms of nephrocalcinosis by feeding lactose in high concentration (V J Feron, personal communication). In young growing animals enhancement of calcium absorption by lactose in milk is doubtless advantageous.⁴

Lower consumption of carbohydrates that