submucous fibroids,² the title is nevertheless misleading.

We have two, more serious concerns. Only 12% of the patients randomised to hysterectomy underwent vaginal hysterectomy, which is a low figure, considering the indications for surgery. Vaginal hysterectomy has a lower morbidity than abdominal hysterectomy; patients have a reduced need for postoperative analgesia and are discharged home earlier.³ The most appropriate comparison for a treatment designed primarily for dysfunctional uterine bleeding must be vaginal hysterectomy. The use of abdominal hysterectomy increases the chance of a type I error being made in favour of the conservative procedure when it comes to factors such as duration of stay in hospital and recovery.

Our second concern relates to the high failure rate of endometrial ablation in the study, with 28 of 96 patients randomised to endometrial ablation requiring retreatment (n=11) or a hysterectomy (n=17) within one year. This figure is considerably higher than that in most published series from centres reporting on 100 or more patients^{2,4} and is higher than the failure rate for endometrial resection in our hospital after five years.⁵ We performed total endometrial resection on 527 patients over five years. Only 18% of these patients required repeat ablation or hysterectomy, or both, during the first five years. Lifetable analysis shows that the need for repeat surgery peaks during the first two years after endometrial ablation. Given that 29% of the women in Pinion and colleagues' study required repeat surgery at one year, we wonder how many more will develop symptoms in the subsequent years. The high failure rate after conservative surgery increases the chance of type II statistical error in favour of hysterectomy when long term success and patients' satisfaction are considered.

Prospective randomised studies continue to be the best way to assess new treatment strategies, and this study is a potentially valuable addition to our knowledge. We have to be careful, however, that the comparison is appropriate and that the best of the old is compared with the best of the new.

HUGH O'CONNOR
Clinical research fellow

ANTHONY DAVIES
Clinical research fellow

ADAM MAGOS
Consultant gynaecologist

Minimally Invasive Therapy Unit and Endoscopy Training Centre,
University Department of Obstetrics and Gynaecology,
Royal Free Hospital,
London NW3 2QG

1 Pinion SB, Parkin DE, Abramovich DR, Naji A, Alexander DA, Russell IT, *et al.* Randomised trial of hysterectomy, endometrial laser ablation, and transcervical endometrial resection for dysfunctional uterine bleeding. *BMJ* 1994;309:979-83. (15 October.)

2 Magos AL, Baumann R, Lockwood GM, Turnbull AC. Experience with 250 endometrial resections for menorrhagia. *Lancet* 1991;337:1074-9.

3 Dicker RC, Greenspan JR, Strauss LT, Cowart MR, Scally MJ, Peterson HB, *et al.* Complications of abdominal and vaginal hysterectomy among women of reproductive age in the United States. *Am J Obstet Gynecol* 1982;144:841-8.

4 Garry R, Erian J, Grochmal SA. A multi-centre collaborative study into the treatment of menorrhagia by Nd-YAG laser ablation of the endometrium. *Br J Obstet Gynaecol* 1991;98:357-62.

5 O'Connor H, Broadbent J, Bourmas N, Richardson R, Rolfe K, Magos AL. Life table analysis of transcervical resection of the endometrium: the results at five years. *Br J Obstet Gynaecol* 1994;101:735-6.

Vaginal hysterectomy is a certain cure

EDITOR,—S B Pinion and colleagues' study comparing endometrial resection and hysterectomy largely ignores the benefits of vaginal hysterectomy.¹ The authors conclude that "hysteroscopic surgery can be recommended as an alternative to hysterectomy for dysfunctional uterine bleeding" despite the finding that 28 of 105 patients required a second operation and that the proportion of

patients who were "less than very satisfied" in the hysteroscopic group (22%) was double that in the hysterectomy group (11%).

In a retrospective audit in our hospital (1989-92) 231 consecutive women complaining of menorrhagia that had been refractory to medical treatment were offered hysterectomy. Women who required surgery for prolapse were excluded, and the surgery was performed by a single consultant firm. Of the 231 women, 157 (68%) had a vaginal hysterectomy (in Pinion and colleagues' study vaginal hysterectomy was performed in only 12 (12%) of 99 cases). In our series 74 patients underwent abdominal hysterectomy, and 62 had a well recognised contraindication to the vaginal route (uterine cavity > 10 cm (33); adnexal disease (18); prophylactic oophorectomy (five); previous caesarean section (five); coincident bladder neck procedure (one)). Vaginal hysterectomy was not performed in 12 of the women in whom no such contraindication was found in the case notes. Vaginal hysterectomy was converted to the abdominal route during surgery in only one case.

Of the 157 vaginal hysterectomies, 69 were done by a consultant, six by a senior registrar, 60 by a registrar, and 22 by a senior house officer. Thus this series does not reflect the personal experience of one surgeon. It does show that junior staff may be taught vaginal hysterectomy without undue difficulty; in contrast, there is a considerable learning curve for endometrial resection. The average length of stay was 4.1 nights for vaginal hysterectomy and 5.0 nights for abdominal hysterectomy, compared with 7.3 nights for all hysterectomies in Pinion and colleagues' study. Complication rates were similar regardless of the route of hysterectomy in our series. Since 1992 the usual stay after vaginal hysterectomy has been three nights, and previous caesarean section is no longer considered to be a contraindication to vaginal hysterectomy.

Vaginal hysterectomy offers the benefits of a certain cure for dysfunctional bleeding, and large studies have shown a quicker recovery and fewer complications after it than after abdominal hysterectomy.² Endometrial resection, with its known substantial failure rate, has not been shown to be an attractive alternative to vaginal hysterectomy, which we believe is the preferred treatment in most cases.

K A LOUDEN
Senior registrar

D N JOYCE
Consultant obstetrician and gynaecologist

Southmead Hospital,
Westbury on Trym,
Bristol BS10 4NB

Whipps Cross Hospital,
London E11

J MOORE
Research registrar

1 Pinion SB, Parkin DE, Abramovich DR, Naji A, Alexander DA, Russell IT, *et al.* Randomised trial of hysterectomy, endometrial laser ablation, and transcervical endometrial resection for dysfunctional uterine bleeding. *BMJ* 1994;309:979-83. (15 October.)

2 Dicker RC, Greenspan JR, Strauss LT, Cowart MR, Scally MJ, Peterson HB, *et al.* Complications of vaginal and abdominal hysterectomy among women of reproductive age in the United States. *Am J Obstet Gynecol* 1982;144:841-8.

Establish severity of blood loss and psychological status before surgery

EDITOR,—In the paper on their trial of hysterectomy, endometrial ablation, and endometrial resection for dysfunctional uterine bleeding S B Pinion and colleagues do not say how they assessed depression.¹ They do, however, report extremely high levels of depression before surgery, which, despite falling afterwards, remained significantly raised. These findings are in keeping with the likelihood that a complicated relation exists between emotional problems and dysfunctional uterine bleeding.^{2,3} For example, if a woman is

suffering from uncomfortable and unusually heavy menstrual blood loss it is easy to see why she might feel miserable and will feel much better after successful surgery. Psychological distress may also alter a woman's perception of her periods or her help seeking behaviour. The criteria used in this study to define clinical dysfunctional uterine bleeding are unclear. The diagnosis seems to have been based on detailed histories of menstrual blood loss; this approach has been shown to be unsatisfactory. When this loss is measured objectively it is poorly predicted by several of the criteria that the authors list: days of bleeding,⁴ amount of menstrual protection used,⁵ and women's subjective reports of loss.⁶ While we accept that the routine measurement of blood loss may not be practical, independent measures such as haemoglobin concentrations can be useful to identify iron deficiency anaemia.⁷

As removal of the endometrium is relatively simple, cheap, and safe it is likely to replace hysterectomy as the first line surgical treatment for dysfunctional uterine bleeding. For these reasons it is also likely that more women who complain of heavy periods will be offered surgical intervention (other than dilatation and curettage). Although this might well be a step forward for women who require surgery, an increasing number of women may be subjected to surgery on the basis of an unverified complaint, which could well be psychological in nature.

We therefore suggest that particular attention should be paid to establishing the severity of blood loss and the psychological status of a woman before she is offered surgery for dysfunctional uterine bleeding. This should include not only taking a detailed history of complaints but also paying attention to the way in which the woman describes her symptoms, since spontaneous descriptions of severe blood loss (such as "it was embarrassing; the blood poured down my legs at the supermarket") are particularly convincing.³ Moreover, simple psychiatric screening is easily available and can provide helpful information in this group of women. Whatever the relation between dysfunctional uterine bleeding and emotional disorder, awareness of a woman's psychological status is useful when deciding on surgery, preparing for operation, and providing high quality aftercare.

J B WRIGHT
Senior registrar in psychiatry

Division of Psychiatry and Behavioural Sciences,
Child and Adolescent Mental Health,
School of Medicine, University of Leeds,
Leeds LS2 9NN

M GREENBERG
Consultant psychiatrist

Jules Thorn Day Hospital,
St Pancras Hospital,
London NW1 0PE

1 Pinion SB, Parkin DE, Abramovich DR, Naji A, Alexander DA, Russell IT, *et al.* Randomised trial of hysterectomy, endometrial laser ablation, and transcervical endometrial resection for dysfunctional uterine bleeding. *BMJ* 1994;309:979-83. (15 October.)

2 Gath D, Cooper P, Bond A, Edmonds G. Hysterectomy and psychiatric disorder: demographic, psychiatric and physical factors in relation to psychiatric outcome. *Br J Psychiatry* 1982;140B:343-50.

3 Greenberg M. The meaning of menorrhagia: an investigation into the association between the complaint of menorrhagia and depression. *J Psychosom Res* 1983;27:209-14.

4 Fraser IS, McCarron G, Markham R. A preliminary study of factors influencing perception of menstrual loss volume. *Am J Obstet Gynecol* 1984;149:788-93.

5 Chimbra TH, Anderson BM, Turnbull AD. Relation between measured menstrual loss and patient's subjective assessment of loss, duration of bleeding, number of sanitary towels used, uterine weight and endometrial surface area. *Br J Obstet Gynaecol* 1980;87:603-9.

Follow up survey in Taunton shows high level of satisfaction

EDITOR,—S B Pinion and colleagues show that hysteroscopic surgery is associated with high levels of satisfaction among patients.¹ We recently wrote to 217 women who had had endometrial resections