Endometrial sampling in general practice

CLARE J SEAMARK

SUMMARY

Unexpected vaginal bleeding is a common problem in general medical practice and likely to increase as more women use hormone replacement therapies (HRT). This study looks at the successful introduction of a technique for endometrial sampling into general practice, allowing earlier diagnosis of endometrial cancer and reassurance for women without serious pathology.

Keywords: vaginal bleeding; hormone replacement therapy, endometrial sampling.

Introduction

NTIL recently, dilatation and curettage (D&C) was seen as the investigation of choice for abnormal uterine bleeding. It had become the most common elective operation in many developed countries without its place in gynaecology being challenged. However, newer techniques have been developed, allowing sampling of the uterus without the need for general anaesthesia, which can be undertaken in an outpatient or general practice setting. A recent review of the subject suggested that the initial assessment of post-menopausal bleeding should involve endometrial sampling by a trained general medical practitioner. A device such as a Pipelle can be used by anyone trained in the use of a uterine sound and it is simpler than insertion of an intrauterine contraceptive device.

Although not part of General Medical Services, the Honiton Group Practice decided to introduce this investigation after consultation with their defence unions and encouragement from the local gynaecologist. With the new arrangements, practices could apply for this procedure to be recognized as 'provision of secondary care within primary care'.

Subjects and method

The Honiton Group Practice serves a population of 14 300 in an East Devon market town and surrounding rural area. There are seven full-time male partners and three part-time female partners. The main gynaecology service is based in Exeter, 16 miles away, although a consultant gynaecologist does a monthly clinic at the Honiton Community Hospital adjacent to the practice.

After becoming familiar with the technique, the use of the Pipelle for endometrial sampling was started at the end of 1993. During 1994 and 1995, 38 women presented with abnormal vaginal bleeding who would previously have been referred to the gynaecology outpatient department. Instead they were referred to the author for Pipelle sampling in the practice.

Results

All the women in the study were over 40 years of age (range 42–74). The reasons for referral are shown in Table 1. A sample was achieved in 29 (76%) of the women. Of these, 28 had a benign report, although three were too scanty to be given a confi-

C J Seamark, $\mbox{MPhil},\mbox{MRCGP},\mbox{MFFP},\mbox{general practitioner},\mbox{ The Surgery},\mbox{Honiton},\mbox{Devon}.$

Submitted: 30 October 1997; accepted: 28 April 1998.

© British Journal of General Practice, 1998, 48, 1597-1598.

dent histological assessment. The woman on Tamoxifen was found to have invasive well-differentiated adenocarcinoma of the endometrium. There were nine failed samplings. These occurred more commonly in the older women who were not on combined HRT. All these women were referred to gynaecology outpatients where further Pipelle sampling was attempted. In eight cases this was also unsuccessful and the women were sent for further investigations. The ninth woman had previously had a transcervical resection of the endometrium (TCRE) and the consultant was more confident undertaking the sampling. All these women had benign pathology, although one woman had a myomectomy for large symptomatic fibroids.

The woman on Tamoxifen was referred for pelvic clearance and now, two years later, she has no gynaecological problems, although she continues treatment for her breast cancer.

Discussion

In this study of women with abnormal vaginal bleeding, 45% were on hormonal therapies. In many cases no abnormality will be detected, but these women need proper assessment in view of the increased risk of endometrial cancer even in women on combination therapies.⁵

Likewise, there are increasing numbers of women taking Tamoxifen for the prevention or treatment of breast cancer who may also have an increased risk of developing endometrial cancer.⁶

In this study, 76% of attempted samples could be successfully completed in general practice. This compares well with studies in gynaecological outpatient clinics. Sampling was found to be easier in the younger women and those on combined HRT. No anaesthesia or analgesia was used, and no woman experienced more than slight discomfort during the procedure and there were no adverse after effects. Very few complications with the method have been reported apart from occasional vasovagal episodes.

When sampling was not possible, this was usually due to stenosis of the cervical canal or another obstruction such as fibroids. It was reassuring that, in eight of the nine cases, sampling was not possible in the gynaecology clinic either.

The Pipelle method of endometrial sampling has been carefully evaluated since its development in 1984. It generally performs well when compared with other samplers such as the Novak and Vabra, and certainly with its predecessor the D&C.^{8,9}

If there is concern that a diagnosis may be missed, particularly if there are other symptoms, pelvic ultrasound in combination with endometrial sampling can be useful. The current gold standard investigation if endometrial sampling fails, or if there is continued concern, appears to be hysteroscopy, where the endometrium can be visualized and targeted biopsies taken.¹⁰

In the women in whom sampling was undertaken, three of the histological reports stated that there was insufficient material for definite histological diagnosis. This usually means that the endometrium is very atrophic and can generally be interpreted as a benign result depending upon the clinical history and examination.⁴

One other finding of interest is that three (two premenopausal and one on HRT) of the 38 women in this study developed breast cancer within 18 months of presenting with abnormal vaginal bleeding. Although the numbers are very small and no conclusions can be drawn from this, it has increased awareness in the practice of breast problems in women presenting with abnormal vaginal bleeding.

Clare J Seamark Brief reports

Table 1. Reasons for undertaking endometrial sampling.

| Reason for sampling | No. in study | Percentage of cases | Mean age (range) |
|---|--------------|---------------------|------------------|
| Irregular/perimenopausal bleeding | 14 | 37 | 46.3 (42-54) |
| Post-menopausal bleeding not on HRT. | 7 | 18 | 56.6 (42-75) |
| Abnormal bleeding on hormone preparation | 17 | 45 | 55.7 (43.3-64.5) |
| Individual preparations | | | |
| Combined HRT | 9 | 24 | 54.3 (46.5-64) |
| Tibolone (Livial) | 6 | 16 | 60.5 (52.5-64.5) |
| Oestrogen patches for premenstrual syndrome | 1 | 2.5 | 43.3 |
| Tamoxifen for breast cancer | 1 | 2.5 | 51.5 |

References

- Grimes DA. Diagnostic dilatation and curettage: A reappraisal. Am J Obstet Gynecol 1982; 142: 1-6.
- Coulter A, Klassen A, MacKenzie IZ, McPherson K. Diagnostic dilatation and curettage: is it used appropriately? *BMJ* 1993; 306: 236-239.
- 3. Seamark CJ. The demise of the D&C. *J Roy Soc Med* 1998; **91:** 76-79
- Shapley M, Redman CWE. Endometrial sampling and general practice. *Br J Gen Pract* 1997; 47: 387-392.
 Beresford SAA, Weiss NS, Voigt LF, McKnight B. Risk of endome-
- Beresford SAA, Weiss NS, Voigt LF, McKnight B. Risk of endome trial cancer in relation to use of oestrogen combined with cyclic progestogen therapy in postmenopausal women. *Lancet* 1997; 349: 458-461.
- Assikis VJ, Neven P, Jordan VC, Vergote I. A realistic clinical perspective of tamoxifen and endometrial carcinogenesis. *Eur J Cancer* 1996; 32A: 1464-1476.
- 1996; 32A: 1464-1476.
 Gupta JK, Wilson S, Desai P, Hau C. How should we investigate women with postmenopausal bleeding? *Acta Obstet Gynecol Scand* 1996; 75: 475-479.
- Eddowes HA, Read MD, Codling BW. Pipelle: a more acceptable technique for outpatient endometrial biopsy. Br J Obstet Gynaecol 1990; 97: 961-962.

- Ben-Baruch G, Seidman DS, Schiff E, et al. Out-patient endometrial sampling with the Pipelle curette. Gynecol Obstet Invest 1994; 37: 260-262.
- Lewis BV. Commentary. Hysteroscopy for the investigation of abnormal uterine bleeding. Br J Obstet Gynaecol 1990; 97: 283-284.

Acknowledgements

Thanks are due to the partners and staff of the Honiton Group Practice, particularly Dr David Seamark, for their help and encouragement in this work. Mr Jonathan West provided training and advice in introducing Pipelle sampling into the practice. The Honiton Group Practice was a Research Practice of the Royal College of General Practitioners from 1995-97. Dr Clare Seamark received the 1996 Sir Charles Hastings and Charles Oliver Hawthorne awards from the BMA for this work.

Address for correspondence

Dr Clare J Seamark, The Surgery, Honiton, Devon EX14 8DD.