

An unnecessary ouch: is routine outpatient endometrial sampling indicated where hysteroscopy reveals an atrophic cavity?

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Abstract There is currently little guidance in the literature as to whether routine endometrial sampling is indicated after a normal or atrophic cavity has been visualised at outpatient hysteroscopy for post-menopausal bleeding. Retrospective electronic database review of women with post-menopausal bleeding attending an outpatient hysteroscopy clinic was performed. Seventy-nine patients underwent outpatient hysteroscopy for post-menopausal bleeding. Forty-four of these (56 %) were found to have normal or atrophic cavities with no other visible pathologies. Forty of these women (89 %) underwent endometrial sampling. Thirty of those sampled (75 %) had an interpretable sample showing a normal or atrophic endometrium on histology, and ten were reported as inadequate for analysis. There were no reports of abnormal histology in this cohort. Routine endometrial sampling at outpatient hysteroscopy where the cavity has been visualised as normal or atrophic did not reveal any unexpected pathology. It may be possible to omit this painful procedure, but further larger studies are required.

Keywords Postmenopausal bleeding · Outpatient hysteroscopy · Endometrial cancer · Pain

Background

Endometrial cancer is diagnosed in between 5 and 10 % of women with post-menopausal bleeding (PMB) [1, 2].

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Outpatient hysteroscopy (OPH) has been shown to be safe, effective, efficient and acceptable to patients [3–5] and is also more cost-effective than the equivalent inpatient procedure. Outpatient endometrial sampling done with diagnostic hysteroscopy is associated with increased pain relative to hysteroscopy alone. We sought to determine whether outpatient endometrial sampling detects endometrial pathology when a normal or atrophic cavity is visualised at OPH. If this procedure can be safely omitted, it should result in decreased pain experienced by our patients without the risk of missed pathology.

Methods

All consecutively attending patients at the Outpatient Hysteroscopy Clinic (OPHC) at Cork University Maternity Hospital were reviewed over a 24-month period. All patients in the study cohort had experienced post-menopausal bleeding (vaginal bleeding occurring more than 12 months after the cessation of menstruation) and had an endometrial thickness of ≥ 4 mm measured on transvaginal scan prior to attendance. Those with suspected pathology (e.g. polyp or fibroid) on the ultrasound were referred directly for inpatient hysteroscopy and curettage. Standardised data was obtained from the electronic database. A single consultant gynaecologist was present for each case and either performed the procedure or directly supervised a specialist registrar. Features indicating a normal or atrophic cavity included a thin, pale endometrium, petechiae formation with distension medium, the absence of irregularity or vascularity in the endometrium or other focal pathologies such as a polyp or fibroid. Endometrial sampling was performed using either Medgyn Endosampler or Endocurette (both blind suction devices).

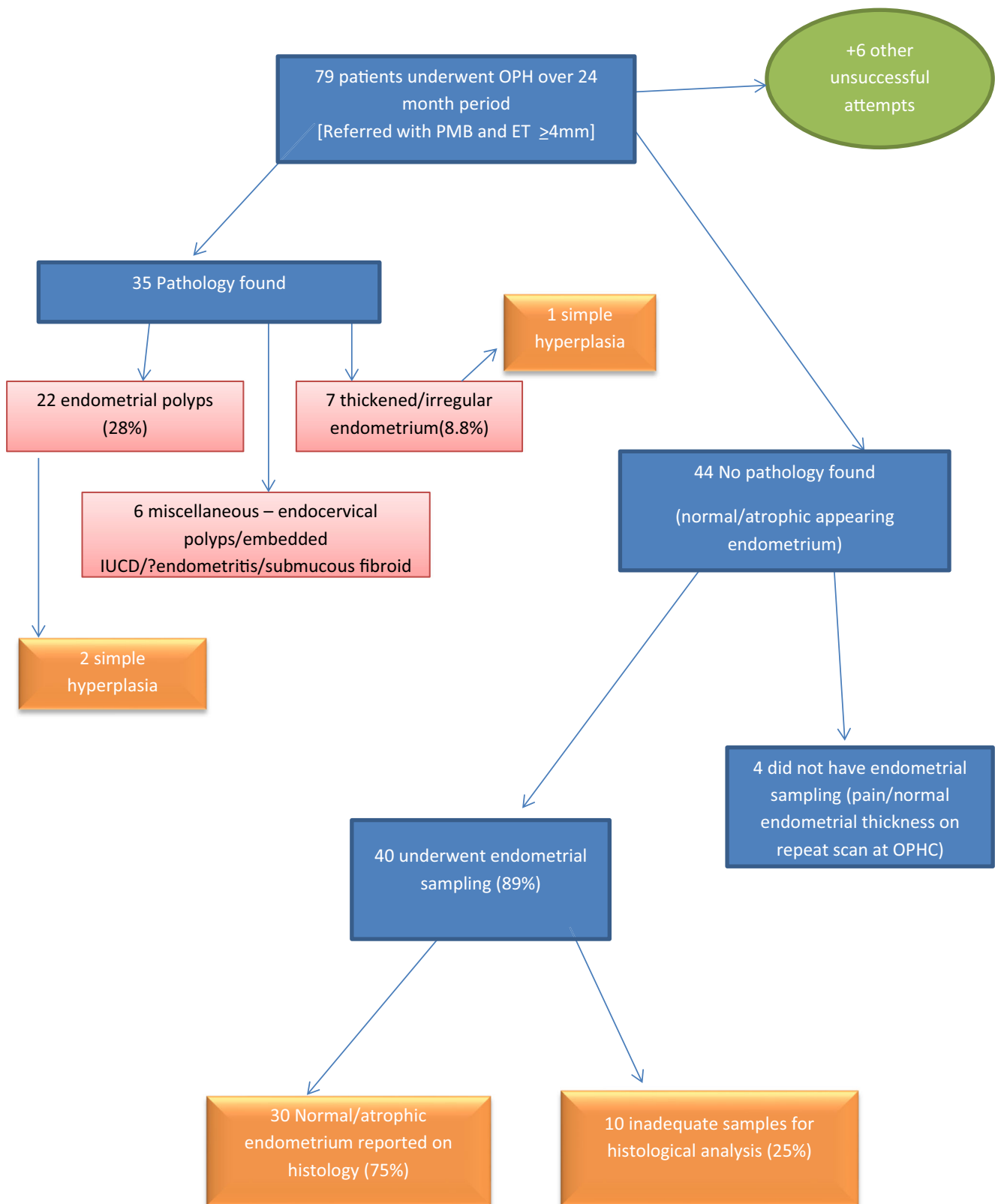


Fig. 1 Flow chart of hysteroscopic assessment of the uterine cavity

Results

Eighty-five patients were referred to the OPHC with PMB. Six patients had failed hysteroscopy (three due to patient discomfort, two due to creation of a false passage in the cervix and one due to technical difficulty owing to a previous Manchester repair). In total, 79 patients underwent successful outpatient hysteroscopy for PMB over the study period. Of these, 44 had a normal or atrophic appearance to the endometrium. Forty of these patients underwent outpatient endometrial sampling. In 30 cases, the pathology report was of normal or atrophic endometrium. In ten remaining sampled cases, the specimen was deemed insufficient for histological examination. These cases were not further investigated unless they represented with symptoms, which none did in the study period. Routine endometrial sampling revealed no unexpected endometrial pathology in patients with PMB where hysteroscopic assessment of the uterine cavity was reported as normal or atrophic in our study population (Fig. 1).

Discussion

Our study suggests that routine endometrial sampling may not be necessary when a normally appearing endometrium is visualised during outpatient hysteroscopy in selected patients with PMB. It is unclear from the literature whether routine endometrial sampling is necessary in this clinical scenario. The ACOG Committee Opinion stated that an insufficient endometrial sample is common in this group (as high as 54 %) [6], and this was reflected in our cohort (25 %). Clark et al.'s meta-analysis [7], regarding the accuracy of hysteroscopy in the diagnosis of endometrial cancer and hyperplasia, concluded that the hysteroscopy was significantly more accurate in the post-menopausal cohort versus pre-menopausal patients. They noted that the diagnostic accuracy of hysteroscopy is high for detection of endometrial cancer. Rahimi et al. [8] found a high incidence of atypical hyperplasia in cases where there was an endometrial polyp, but an otherwise unremarkable endometrium. However, in our study, we excluded those with polyps or any findings other than a completely atrophic appearance to the cavity.

We acknowledge the limitations of our study in terms of small study number and the retrospective design. Regrettably, BMI was not recorded on each patient at the time of attendance. The finding of no histological endometrial abnormalities in this group is at variance with findings from some other studies. This may be explained by the referral pattern to the outpatient hysteroscopy clinic whereby patients with ultrasound findings suspicious for malignancy or significantly large endometrial polyps at the PMB clinic are directed

towards inpatient investigation rather than outpatient hysteroscopy.

Pain experienced during outpatient hysteroscopy and endometrial biopsy influences overall acceptability to the patient and willingness to undergo the same procedure in the future [9]. Endometrial sampling is a painful procedure, and this small study suggests that it may be unnecessary where there has been adequate visualisation of a normal or atrophic uterine cavity in a selected sub-population of post-menopausal bleeders by appropriately trained hysteroscopist. A larger prospective study may clarify this matter further and improve the acceptability of outpatient hysteroscopy to our patients.

Conflict of interest Dr. Siobhan Corcoran and Dr. Cathy Burke have no conflict of interest to declare.

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All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000.