

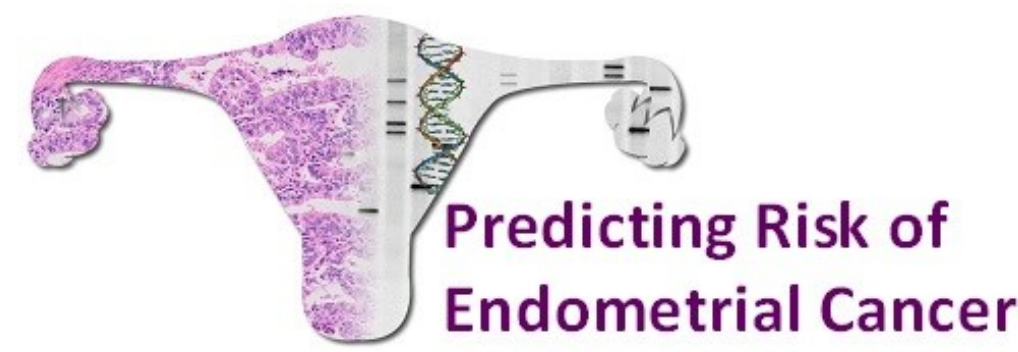
Evaluation of effectiveness of endometrial sampling with pipelle endometrial biopsy compared to curettage and directed biopsy in pre- and postmenopausal women.

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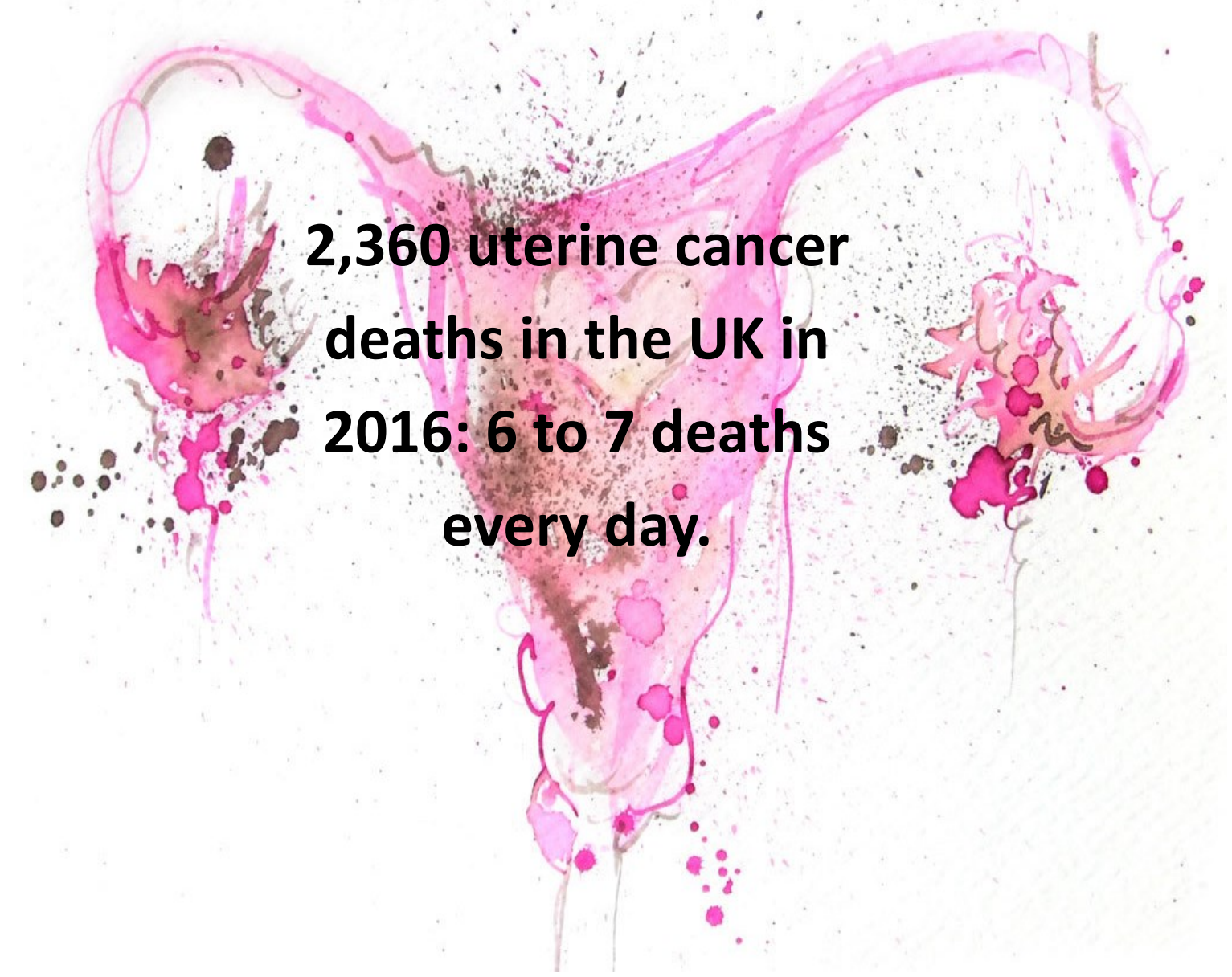
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Introduction

Abnormal uterine bleeding should be investigated initially by ultrasound (USS) followed by hysteroscopy if the endometrium is abnormal on USS. It is recommended this should be performed in the outpatient setting unless there are contraindications. The endometrium is commonly sampled using a pipelle, which may provide insufficient material for histological examination. Patients are often subjected to further investigation, including a repeat biopsy, to rule out serious underlying causes.



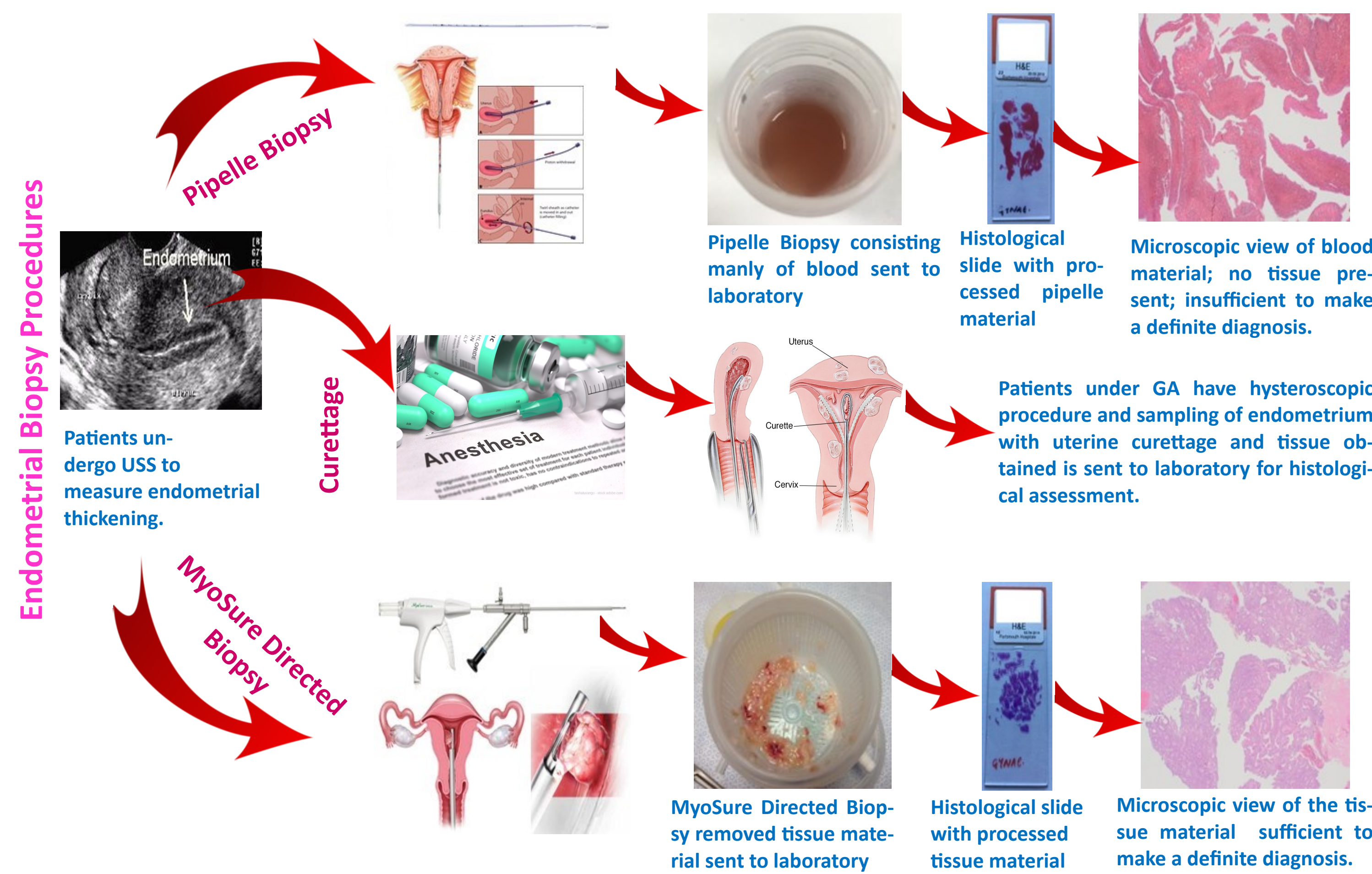
Objectives

The aim of the study was to evaluate the effectiveness of pipelle endometrial biopsy in pre- and postmenopausal women compared to curettage and MyoSure directed biopsy and to record the number of repeated biopsies required to establish a diagnosis.

Materials & Methods

A retrospective cohort study was performed evaluating endometrial biopsy samples from electronic histological records to confirm the nature of the sampling technique and number of procedures following pipelle sampling, either reported sufficient for histological diagnosis or insufficient for histological diagnosis, in pre- and postmenopausal women.

Patients presenting with abnormal uterine bleeding underwent USS and hysteroscopic assessment. If a thickened endometrium was identified or there were changes suspicious of polyps, the operator performed either a pipelle, directed endometrial biopsy/resection with MyoSure or booked patients for a biopsy under general anaesthetic. All tissue biopsy specimens were sent to laboratory for analysis. This study focused on the patients who had an initial pipelle biopsy.



Results

Premenopausal group (n=329): 11.9% of pipelle biopsies were reported as insufficient for diagnosis; 88.1% of patients had a single pipelle reported for a diagnosis, of these who had an initial pipelle 17.2% had a further curettage biopsy, 5.9% a directed biopsy, 17.2% another pipelle, 59.7% had no repeated procedures.

Postmenopausal group (n=129): 21.7% of pipelle biopsies were reported as insufficient for diagnosis; 78.3% of pipelle biopsies were sufficient for diagnosis, of those 9.9% had an initial pipelle followed by curettage, 19.8% by directed biopsy, 7.9% by pipelle, 62.4% had no repeated procedures. 3.8% and 21.4% of repeated curettage were insufficient in pre- and postmenopausal groups respectively.

Directed biopsies with MyoSure always provided sufficient material for diagnosis. Distribution of results from pipelle sampling presented in Fig. 1-2. Analysis of the data demonstrated that pipelle biopsy with both sufficient and insufficient material for histological assessment frequently required additional biopsies due to concerns that biopsy was not representative (Fig. 3). The method of repeat biopsy was determined by the preferred of the individual operator.

Conclusion

Pipelle provided more insufficient biopsies in postmenopausal group than the premenopausal group. In both groups, a high number of repeated biopsies were required, which could have been avoided if directed biopsy had been used. Curettage is mainly used with general anaesthetic, but should be replaced by the MyoSure directed biopsy, which has the benefit that it can be done in an ambulatory clinic avoiding general anaesthesia. This is a more cost effective; the amount of biopsy tissue is superior and is reliably taken under direct vision from the area of abnormality avoiding repeated procedures. Furthermore, polyps and other pathologies can also be resected with this device in a single procedure.

In premenopausal women with thickened endometrium, pipelle can be used without a hysteroscopic examination, but as we have demonstrated the number of repeated procedures is still high, despite the sufficiency of obtained material. Thus, use of a directed biopsy with hysteroscopy would provide a superior service to the patient, it would significantly shorten the treatment pathways for these patients and ultimately be more cost effective for the healthcare economy.

