

COMPARISON OF THE HISTOPATHOLOGICAL EVALUATION OF PRE AND POSTMENOPAUSAL WOMEN USING DILATATION AND CURETTAGE AND THE PIPELLE BIOPSY DEVICE

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ABSTRACT

Outpatient endometrial sampling, using the Pipelle endometrial biopsy device, is an alternative procedure for dilatation of the cervix and curettage (D&C). In this study we compared the reliability of the Pipelle with D&C, in women with pre and post menopausal bleeding and 90.3 % was considered to be successful. Insufficient material was obtained in 22.6 % of cases with Pipelle whereas with D&C 12.9% provided inadequate tissue. The Pipelle is associated with minimal pain, haemorrhage, does not require anesthesia and is much cheaper, acceptable and convenient for most patients. Our results show that this method can be used for outpatient endometrial sampling.

Key Words: Endometrial biopsy, Pipelle, Postmenopausal bleeding.

INTRODUCTION

Dilatation of the cervix and curettage of the endometrial cavity (D&C) is commonly undertaken to exclude endometrial carcinoma in pre and postmenopausal women with abnormal uterine bleeding. This procedure is associated with morbidity and mortality risks. Outpatient endometrial sampling using the Pipelle endometrial biopsy device provides adequate tissue for histopathological diagnosis (1, 2) and is considered to be acceptable by patients (3). The purpose of this prospective study was to compare the reliability of the Pipelle endometrial biopsy device with D&C in women with perimenopausal bleeding.

SUBJECTS AND METHODS

This study included sixty - two women (age range 34 - 65 years) who had been admitted for D&C with the complaint of perimenopausal or postmenopausal bleeding. Under general anesthesia a Pipelle sampler was used initially then D&C was performed in a routine manner. The Pipelle consists of a piston sliding within a flexible polypropylene outer sheath with an external diameter of 3.1 mm. Withdrawal of the piston creates a negative pressure and therefore endometrial tissue is aspirated into the sheath.

Biopsy material obtained with both methods were sent to the pathology laboratory of the same hospital.

All histological preparats were evaluated by two pathologists at the same time. Both were unaware of the type of sample (Pipelle or D&C) in order to ensure blind assessment. Only the materials containing at least two endometrial tissue fragments with both stroma and glandular components were considered for histopathological examinations. Other materials that did not fulfil these criteria were grouped as "insufficient material". The hormonal evaluation was made in all the cases other than endometrial polyp or epidermoid carcinoma except in two cases in 24 cases, hysterectomy specimens were possible in those cases.

RESULTS

In 56 of 62 cases (90.3%), the reports on both sampling procedures were identical (Table I). In 24 of these cases a hysterectomy was performed later for

various reasons. The histopathological examinations of the endometrium showed similar results in both procedures.

In 8 cases both procedures yielded insufficient material (Table II). In 8 cases inadequate specimens were obtained with Pipelle and D&C which showed endometrial polyps in 2, proliferative endometrium in 4 and benign endometrium in 2 cases. Epidermoid carcinoma was diagnosed in 4 cases with both methods. In 2 cases Pipelle sampling showed secretory endometrium whereas D&C yielded insufficient material. The results of posthysterectomy of both cases were in accordance with the results obtained by the Pipelle method.

the fact that endometrial polyps and focal endometrial carcinoma may be 'missed' by Pipelle and D&C.

In our study, 2 cases of endometrial polyps could be detected by Pipelle but all 4 cases of endometrial carcinoma were diagnosed by both methods.

The insufficient material obtained in 14 of 62 cases (22.6%) may raise the question that this method is not reliable. However in 8 of the 14 cases (12,9%), D&C also provided inadequate tissue, so this shows that the Pipelle method is acceptable. These results are comparable with similar studies.

Table I: Comparison of histopathologic evaluation with Pipelle and D&C.

	Insufficient material	Proliferative or secretory endometrium	Endometrial polyp	Epidermoid Ca
Pipelle	14	44	—	4
D & C	8	48	2	4

Table II: Quantitative comparison of Pipelle and D & C results.

	Pipelle		D & C	
	n	%	n	%
Sufficient material	48	77.4	54	87
Insufficient material	14	22.6	8	12.9

DISCUSSION

Outpatient endometrial sampling by Pipelle in postmenopausal women has been reported to be successful and reliable in 79% of patients by Batool et al (4). In our study 90.3 % of the endometrial sampling by Pipelle were considered to be successful. Forthergill et al (5) reported 4 cases with endometrial carcinoma in their series which were detected by both methods. He also pointed to

Eddows et al (3) reported the use of outpatient Pipelle aspiration technique to be associated with minimal discomfort due to pain, haemorrhage etc. in most women. When the fact that the two thirds of D&C's may provide insufficient material (5), the risks of general anaesthesia and the cost of hospital admissions are taken into consideration, it is concluded that Pipelle technique is cheaper, more acceptable and more convenient than D&C for many patients (6-8). Such a policy in our hospital would

save more than 100 - 150 D&C procedures and complications associated with it annually.

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