

EVALUATION OF "PIPELLE" A DISPOSIBLE DEVISE FOR ENDOMETRIAL SAMPLING

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SUMMARY

Dilatation and curettage (D&C) is one of the most comonly performed procedures in the obsterial and gynaecological practice. "Pipelle" has been introduced to make this procedure more safe, effective and less cumbersome. A short trial was performed on out patients using "Pipelle" instead of D&C for endometial sampling. It was foud to be very well tolerated by the patients, only in one case the specimen was termed as inadequate for reporting by the histopathology department.

INTRODUCTION

Dilatation and curettage (D&C) is the most common gynaecological procedure in any practice of gynaecology and obstetrics, worldwide. In Pakistan apart from the most frequent it is also the most abused procedure. Dilatation and curettage can be diagnostically inaccurate and therapeutically ineffective. Being a blind procedure, it will miss 10% of endometrial lesions¹ yet despite these long established limitations it continues to be widely practiced.

There is ample evidence that adequate endometrial samples can be obtained by other methods i.e Karman catheter, the Novak curette, the Vabra aspirator, the Gravlee jet washer, the endocyte device, and more recently the Pipelle De Conier, made of soft plastic.² The pipelle is ideal for out patient use.

The Pipelle is a flexible polypropylene suction cannula which has an outer sheath 23.5cm in length and 2.6mm in outer diameter. There is a distal side port (2.1mm in diameter) through which the specimen is aspirated. Withdrawal of an inner piston generates a negative pressure and a specimen of

endometrium is aspirated into the sheath.

The purpose of this small prospective trial was to determine the reliabilty of the Pipelle endometrial biopsy instrument in recovering adequate tissue for diagnoses and to compare the specimens obtained with those obtained by the standard D&C.

MATERIAL AND METHODS

Paired endometrial specimens were obtained from ten consecutive patients who were referred to our minor operation theater for D&C. The patient was placed in the lithotomy position and parts cleaned and draped. An endometrial specimen was first obtained by using the pipelle. It was introduced into the endometrial cavity to the fundus and the piston withdrawn, thereby creating a negative pressure. Neither general anaesthetic nor cervical dilatation was required. Each patient then under went a standard D&C.

All the specimens obtained were sent for histopathology in 10% formaldehyde. Specimen adequacy, that is the amount of tissue necessary for the

pathologist to make a diagnosis was also evaluated. An adequate specimen was defined as one or more pieces of endometrial large enough to determine the gland-to-stroma ratio and endometrium, morphology. The results of the two endometrial biopsies were compared.

After the biopsy the patients were asked to comment on the intensity of any pain experienced during either procedure. Pain or discomfort was subjectively graded as mild, moderate or severe.

RESULTS

Ten patient referred to our minor operation theater for a D&C for various menstrual disorders were enrolled in this study. The patient had a mean age of 32 years (range-22-43) The Pipelle was easy to handle and very well tolerated by the patients. Discomfort was reported as mild, moderate, or severe. All the patients found the Pipelle only mildly uncomfortable. Five of the ten patients found the D&C unbearable and had to be given an anaesthetic.

No complication occurred with either procedure. The histology was reviewed by several pathologists. A comparison revealed that the pipelle biopsy correlated with the D&C histology in 9 of the ten cases. In one of the ten, the pipelle specimen was termed inadequate for reporting.

DISCUSSION

Although only ten patients were involved, this prospective clinical trial shows that the pipelle can be used to obtain adequate specimens from the endometrium. The fear of missing endometrial carcinoma was addressed by Stovall et al in which he focused exclusively on a selected group of patients suffering from confirmed

carcinoma of the endometrium. 40 patients had Pipelle biopsy and 100% of the tissues obtained were described by the pathologist as adequate both in quality and quantity. In only one of the 40 patients did the biopsy not confirm endometrial carcinoma. In that case carcinoma was confirmed in the hysterectomy specimen but was only a single focus.³ Since the pipelle does not sample the whole of the endometrium there is a chance that a small occult tumor will be missed. Occasionally D&C will also miss an endometrial carcinoma. The similarity between the Pipelle specimen and that obtained by D&C is reassuring. The Pipelle would therefore appear to be an effective and safer alternative to the traditional D&C. As an out patient procedure the Pipelle has an advantage for follow-up in patients on H.R.T.⁴ and in endometrial dating in infertility. Its advantages are simplicity of procedure, non requirement for anaesthesia or perioperative antibiotic cover and no pain relief postoperatively. The hospital stay too is greatly reduced. The one major disadvantage is its price. However since it does avoid the risk and expense of a general anaesthetic, perhaps it evens out. We found Pipelle sampling much more acceptable to the patients and is recommended in those who can afford it.

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