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## Endometrial biopsy with uretral plastic No. 12 sonde

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The authors demonstrate technique for obtaining endometrial fragments in 25 patients sent to Gynecological Cancer Preventive Service of the Arnaldo Vieira de Carvalho Cancer Institute, during the period of September 1991 through January 1992, presenting abnormal uterine hemorrhage.

Technique consists in vacuum aspiration with the support of a No. 12 uretral sonde, provided with one lateral opening only. Correlation with curettage was positive in 88% of the patients; biopsy with sonde did not result in confirmation in three patients only.

No complications at all were observed (infection, hemorrhage or uterus perforation).

Authors understand that this method is in conformity with a correct diagnostic performance, being a low cost procedure, almost painless, easy to be done and furnishing sufficient material for the histo-pathologic diagnosis, in 88% of the cases studied.

**UNITERMS:** Endometrial biopsy. Abnormal uterine hemorrhage.

### INTRODUCTION

Uterine curettage, today, still continues being a very important resource for assessment of women inclined to an uterine cancer and diagnosis of abnormal hemorrhage (KAUNITZ et al., 1988).

However, confinement and anesthesia needs make this procedure not feasible to be done at ambulatory premises. As a result, other countless methods have been tried, such as the Vabra aspirator, rotating of a small brush in the endometrial cavity (De BRUX) and the Novak curette.

From these, the method that more approaches nearly to an uterine curettage is, without any doubt, the Vabra aspirator, resulting in a correlation of 96% (JENSEN, 1970; GRIMES, 1982), however, the need of a vacuum electrically obtained, makes this method expensive and difficult to perform (SLEDMERE, 1981; BUTLER, 1984).

So, we proposed ourselves to test, here, a low cost and easily applicable technique, consisting in the aspiration of endometrial fragments through an uretral sonde attached to a 20 ml syringe and compare the results obtained with the uterine curettage already made in these same patients.

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## MATERIAL AND METHODS

Twenty-five patients, sent by the Gynecological Cancer Preventive Service of the ICAVC, were included in the study, during the period of September 1991 through January 1992, presenting abnormal uterine hemorrhage.

Age of patients varied from 40 to 74 years, resulting in an average of 52.4. First of all, an accurate gynecological examination is done: valva, vagina and uterine coli are examined with a colposcope, in order to exclude other causes, besides the abnormal endometrial cavity bleeding.

After vaginal embrocation with lugol, a No. 12 sonde is introduced in the uterine cavity, by the support of a Cheron pinnace; in 90% of the cases seizure or enlargement of the uterine coli was not necessary, as the sonde surpassed easily the resistance of both, the external and internal cervical ostiums.

Once placed in the uterine coli, sonde is fixed to the syringe-grasp set and, with the help of one of the hands, vacuum is crated. Right after, without destroying the vacuum, with the other hand, sonde is brought out of the endometrial cavity. This procedure must be repeated 3 times, approximately, in order to get material necessary for the histopathologic examination. After these aspirations are performed, endometrial fragments are observed in the interior of the sonde, mixed to mucus and blood.

Material of the sonde is taken off by passing a 10% formol solution with the aid of a syringe.

A very important detail to be observed when the sonde is made out in plastic material is that it "must have only one lateral opening", as models presenting two or more openings loss vacuum easily, being not possible an adequate collection of material.

Patients were submitted to curettage proofs days after biopsy by sonde was made and results were compared.

## RESULTS

Results showed a 88% positive correlation between biopsy and curettage proofs; biopsy with sonde could not collect material of seven patients.

In four of them, the pathologic anatomy examination of the curettage material was harmonious and, in other three patients, endometrial was of atrophic type.

There were two endometrial G1 and G2 adenocarcinoma cases; two adenomatosis hiperplasia without any atypias and one of cystid hiperplasia.

Seven cases of secretory endometrial, four of proliferative endometrial and two others where aspiration got endocervical glands only (Table 1).

No complications at all were observed considering both of the methods (hemorrhage, infection or perforation). Most of the patients showed a good tolerance to sonde biopsy, being the uterine coli seizure needed in only 20% of the cases.

## DISCUSSION

Several methods for obtaining endometrial material have been utilized; these techniques involve suction, irrigation followed by aspiration (Grav-Lee), rotation of a

**Table 1**  
**Results of biopsy with sonde compared to the obtained in curettage proof**

Nr.of cases	Biopsy with sonde	Curettage proof
02	Endometrial adenocarcinoma	Endometrial adenocarcinoma
02	Adenomatosis hiperplasia	Adenomatosis hiperplasia
01	Without atypias	Without atypias
07	Cystid hiperplasia	Cystid hiperplasia
04	Endometrial secretory	Endometrial secretory
04	Mucus and fibrine	Mucus and fibrine
02	Endocervical gluds	Mucus and fibrine
03	Mucus and fibrine	Atrophic endometrial

small brush in the endometrial cavity (De Brux brush), Novak curette and, more recently, a new device for aspirative biopsy obtainance, named "endometrial pipelle" (KAUNITZ et al., 1988).

These methods have shown very accurate diagnostics varying from 70% to 92% (GUSBERG et al., 1981; BIBBO et al., 1982; KOSS et al., 1982), with the disadvantage that, cytological techniques (brushing, irrigation, etc.), need professional trained in this area (KOSS et al., 1981; KOSS et al., 1982; POISON et al., 1984; FERENCZY et al., 1984) as, even the most experients face difficulties in the correct diagnosis (KAUNITZ et al., 1988).

Until hysteroscopy does not become a widely diffused procedure in our area, curettage continues being as the standard method for the endometrial cavity study. The more similar procedure is the Vabra aspirator,

presenting a correlation of 96% with the uterine curettage (JENSEN, 1970; GRIMES, 1982). This procedure, however, needs vacuum electrically obtained, making this method more expensive and difficult to be applied (SLEDMERE, 1981; BUTLER, 1984).

## CONCLUSION

It is an easy method, can be ambulatorily performed, almost painless, presenting a minimum risk and at low cost, presenting quite satisfactory results (88%) and, consequently, indicated adequately for diagnosis purpose in what refers to endometrial injuries.

Feasibility justifies propaedeutics.

## RESUMO

**Introdução:** Os autores demonstram a técnica de obtenção de fragmentos endometriais em 25 pacientes encaminhadas ao Serviço de Prevenção do Câncer Ginecológico do Instituto do Câncer Arnaldo Vieira de Carvalho por quadro de sangramento uterino anormal no período de setembro de 1991 a janeiro de 1992.

**Material e Métodos:** A técnica consistiu na vácuo aspiração do endométrio com auxílio de sonda uretral nº 12 de orifício lateral único.

**Resultados:** A correlação com curetagem foi positiva em 88% dos casos; a biópsia com sonda não mostrou confirmação em apenas três pacientes. Não foram observadas complicações de qualquer espécie (infecção, hemorragia ou perfuração uterina).

**Conclusão:** Os autores concluem que o método está adequado a uma correta abordagem diagnóstica, trata-se de procedimento de baixo custo, pouco doloroso, de fácil execução e que possibilitou material suficiente para o diagnóstico histopatológico em 88% dos casos estudados.

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