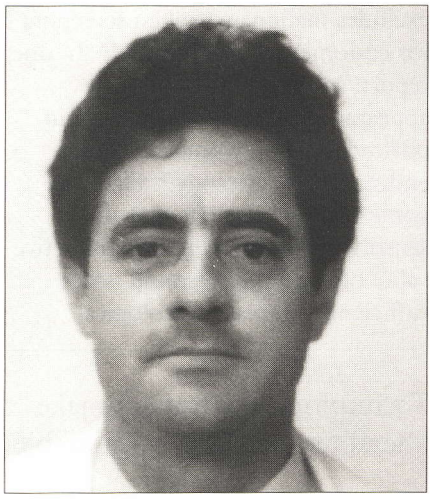
Should Diagnostic Curettage be Abandoned? — Dr PR de Jong



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Curriculum Vitae

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Summary

Dilatation of the cervix and endometrial curettage (D&C) is a traditional and commonly performed procedure in gynaecology. It has been mainly used in the diagnosis and management of abnormal bleeding although women with a wide spectrum of disorders have been subjected to the operation. The place of D&C in current gynaecological practice is debated and alternative diagnostic options offered.

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Physicians, Family; Dilation and Curettage; Routine Diagnostic Tests; Gynecology

Introduction

Dilatation of the cervix and curettage of the endometrium (D&C) is a widely performed procedure in gynaecology.[1] It is usually done under general anaesthetic in an operating theatre.[2] Women readily accept a D&C when their practitioners deem it necessary, and many patients desire the procedure to "cleanse" what is perceived to be a uterine cavity with an accumulation of debris. It has been employed in the past for both diagnostic and therapeutic purposes.[2]

Indications for a Diagnostic D&C

Traditional dogma suggests that women with abnormal vaginal bleeding be investigated by D&C.[1] Yet those below 40 years of age *seldom* have organic lesions of the endometrium to account for their symptoms, so in these women the pathology yield is minimal.[3] Similarly D&C is unhelpful in diagnosing bleeding disorders with a hormonal basis,[4] particularly if done at an inappropriate time in the menstrual cycle. Curettage is of limited value in establishing the presence of focal endometrial lesions causing bleeding and inaccessible pathology is easily missed.[4] The recent introduction of endometrial sampling devices has reduced the range of indications for diagnostic D&Cs. Several plastic sampling tools are available for obtaining either cytological or histological endometrial specimens. The "Acurette" device (Rocket, London) obtains a scrap of endometrial tissue for histological analysis; the "Endopap" (Sherwood Medical, St Louis) is suitable for securing cytological specimens of the endometrium. Many other similar devices are in current use. These samplers are passed transcervically into the uterine cavity without the need for premedication or analgesia.[5] Any discomfort is mild and transient. They are inexpensive and obviate hospital admission and D&C under general anaesthetic.[5] (Table 1). Endometrial sampling is well tolerated by most women, but may be difficult if the cervix is stenosed or atrophic. Women accept the discomfort especially if the alternatives are appreciated. Frail or infirm subjects benefit from an out-patient (or office) procedure without anaesthetic, and the cost-saving is considerable. If tissue sampling is

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Table 1: Indications for Endometrial Sampling

(i) Postmenopausal bleeding

(ii) Abnormal perimenopausal bleeding

(iii) Abnormal uterine bleeding unresponsive to hormonal therapy

(iv) Monitoring hormone replacement therapy

(v) Screening for endometrial neoplasia in high-risk women

unsatisfactory, a hysteroscopic examination of the uterine cavity and endometrium is preferred. This is possible under local anaesthetic,[3] although certain women would refuse an awake procedure in the lithotomy position (Table 2). If

Pathology yeilded by D&C in younger women, is minimal

endometrial sampling is unavailable, the expertise to perform hysteroscopy insufficient, or if the procedures fail (especially in anxious women) then D&C may be the only alternative.

Most theatres, even in smaller rural hospitals, have a cystoscope available. The purchase of a diagnostic sheath at a modest cost makes diagnostic hysteroscopy with a fluid distension medium feasible.[1] When performed under local anaesthetic with a CO_2 uterine insufflator, most women rate the discomfort of hysteroscopy no more than that of dysmenorrhoea.[3]

At present the value of an ultrasound scan for demonstrating intrauterine pathology is unclear. While histological opinion is clearly impossible, sonar may demonstrate polyps and other uterine lesions. Recent work describes the use of transvaginal ultrasonography for detecting endometrial abnormalities in women with postmenopausal bleeding.[6,7] Some workers suggest that an endometrial thickness of less than 5mm allows conservative management of women with postmenopausal bleeding, or

Table 2: Alternatives to Diagnostic D&C

(i) Cytological examination of endometrial cells collected from the vaginal fornix

(ii) Cytological endometrial sampling with a disposable sampler

(iii) Histological endometrial sampling with a disposable sampler

(iv) Diagnostic hysteroscopy with biopsy.

(v) Ultrasound scan of the endometrium in selected cases a possibility in future.

excludes malignancy when screening for endometrial carcinoma.[6,7] In one report, a normal ultrasonic appearance of the endometrium in postmenopausal women excludes endometrial pathology.[8] However a contrary view suggests that the sensitivity and the negative predictive value of vaginal ultrasound is not sufficient to replace histological

Technological advances make liberal use of D&C undesirable

examination of the endometrium.[9] Clearly further work on the subject is required.

The value of vaginal cytology rests on the assumption that exfoliated endometrial cells collect in the posterior vaginal fornix and a Pap smear may demonstrate abnormal cells gathered from this area.

Is there still a place for the diagnostic D&C? As far back as 1958, Word and colleagues[10] published an article entitled "The fallacy of simple uterine curettage". Despite "thorough" curettage by an experienced gynaecologist, large areas of the endometrium remain unsampled.[1] D&C is not infallible, and endometrial biopsy by means of a plastic sampling device is certainly no worse than D&C for diagnosing pathology.[5] Undoubtedly some valid indications for D&C exist today and it will probably always have a niche in gynaecology (Table 3).

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Table 3: Indications for a Diagnostic D&C

(i) Absence of alternative forms of tissue sampling

(ii) Failure to obtain adequate tissue by other methods

(iii) Method failure of alternative forms of sampling

(iv) Cervical stenosis or severe cervical atrophy

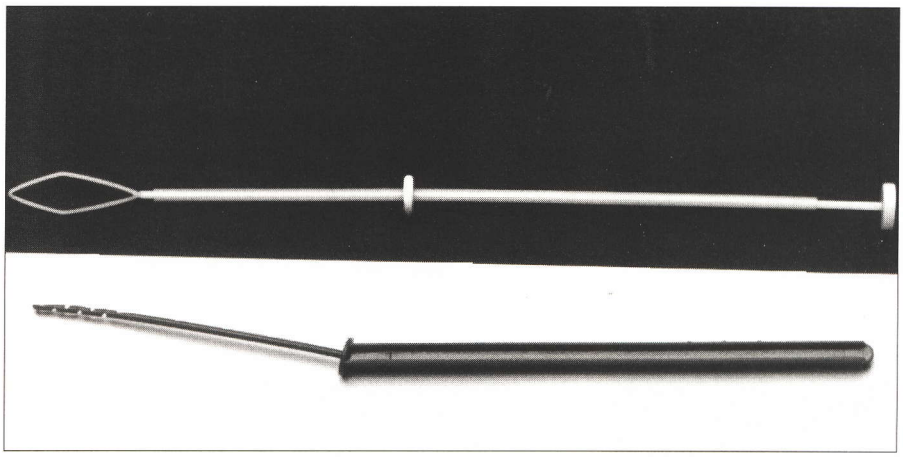
(v) Patient unwilling/unable to tolerate alternative procedure

(vi) Suspected pregnancy complications, ie ectopic pregnancy, incomplete abortion

Endometrial Sampling – A Gynaecologist's Job?

Sampling endometrium with a disposable plastic sampler is generally a simple task. The technique is readily mastered after demonstration and is no more difficult than taking a Pap smear. The majority of women may have the procedure in their family physician's rooms. If sampling is difficult or painful, an alternative procedure is advocated. (See Table 3).

Sampling may be done by any person instructed in the method. The technique of diagnostic hysteroscopy is best mastered by a practising gynaecologist after suitable teaching and supervision.



Above: "Accurette" disposable curette; Below: "Endopap" endometrial sampler

Indications for a Therapeutic D&C

In the past D&C has been used in the management of pelvic pain, leucorrhoea, dysmenorrhoea and infertility. The argument for D&C in these cases is more empirical than scientific and its use as a "gynaecological panacea" is unjustified. It causes a number of complications including endometritis, uterine perforation with bleeding, synecchiae formation and urinary tract infection.[1] D&C is still widely practised for abnormal bleeding, but evidence suggests that a reduction of menstruation in the first period after D&C is followed by increased loss subsequently.[12] However patients are not averse to "laundering" the uterus and the placebo effect of a D&C on perceived menstrual abnormality is considerable. Valid indications for a therapeutic D&C are as follows (Table 4).

Table 4: Indications for a Therapeutic D&C

(i) Pregnancy complications
- First trimester termination of pregnancy
- Missed abortion
- Evacuation of uterus
- Management of trophoblastic disease

(ii) Benign conditions of the uterus
- Polypectomy
- Cervical stenosis

(iii) Contraception
- Removal of IUCD with "absent" strings

Conclusions

Knowledge and technology in gynaecology has improved immeasurably since the introduction of uterine curettage. While change for the sake of change is undesirable, modern advances have made the liberal use of D&C for diagnostic and therapeutic reasons undesirable.

... Should diagnostic curettage be abandoned?

Better and cheaper alternatives are now available, and the informed practitioner is urged to take advantage of these options.

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