

DILATATION AND CURETTAGE

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DILATATION and curettage, though one of the commonest of gynecologic operative procedures, is not done frequent enough and often is performed in a manner which makes its value dubious. Like so many other so-called minor procedures, it has suffered from being thus classified and has been utilized by the casual surgeon, with subsequent grave sequelae.

This procedure may be diagnostic or therapeutic and, on occasion, a combination of the two. It is in the diagnostic field that the greatest number of errors occur. When the procedure is properly carried out, tissue from the endocervix may be obtained separately from that in the uterine cavity (fractional curettage), thus making it possible to differentiate cervical from corpus abnormalities. The curet also permits a modified digital exploration of the uterine cavity which demonstrates irregularities. By careful gross examination of the tissue removed, it is often possible to obtain a clue as to the presence or absence of malignancy. Tissue removed should always be subjected to careful microscopic examination. Careful bimanual and rectovaginal examination should, of course, always be combined with dilatation and curettage. When a patient is under anesthesia, we are presented with an excellent opportunity for complete and thorough examination without the apprehension and fear of pain imposed by consciousness. Significant ovarian disease may also be found.

Indication

The commonest indication for diagnostic dilatation and curettage is bleeding. In the younger age group, so-called functional bleeding is the most frequent cause. Such a diagnosis, however, is not possible without a confirmatory dilatation and curettage. A curettage is preferable to endometrial biopsy performed in the office since, with the patient anesthetized, it is possible to empty thoroughly the uterine cavity, providing a secondary therapeutic effect. Thorough curettage will eliminate, in most cases, the endometrial polyp as the cause of bleeding irregularities. Oftentimes repeating the procedure in this group will control hemorrhage and avoid more drastic procedures, thereby maintaining the childbearing function.

When one is seeking the cause of intermenstrual bleeding in the presence of a clean cervix, fractional curettage should be carried out and the tissues from the two sites examined separately. It is also wise, in these instances, to carry out a diagnostic conization as well. Any woman experiencing intermenstrual spotting or bleeding, with no obvious cervical source, should have the benefit of such an examination.

In the menopausal age group, aberrations from normal are not unusual. The physician investigating the problem must eliminate carcinoma as a cause.

At the time of menopause, bleeding should be less frequent, of shorter duration and of diminished quantity. Due to the present day tendency to misuse hormonal therapy, irregular or profuse bleeding during the menopause is increasingly common. When this problem presents itself, the only method of proving that hormones have caused the bleeding is by thorough endometrial curettage. It is always possible for a patient to develop carcinoma concomitant with hormonal therapy. Menopausal irregularities often can be controlled by dilatation and curettage, thereby eliminating such radical methods as castration or hysterectomy. Unexplained discharge is also a frequent symptom of carcinoma of the endometrium and, in such cases, dilatation and curettage is a mandatory procedure.

Any woman who experiences postmenopausal bleeding or spotting, with or without hormonal therapy, should have dilatation and curettage with thorough examination under anesthesia in order to exclude carcinoma and ovarian disease. One may complete the dilatation and curettage without having discovered the origin of the bleeding, but malignancy, for the most part, will have been eliminated as a causative factor.

The surgeon is constantly confronted with the problem of whether or not dilatation and curettage should be performed for the asymptomatic cervical polyp. As a general rule a Papanicolaou smear should be taken, followed by removal of the polyp in the office (preferably with a tonsil snare). Should the polyp recur, a dilatation and curettage is indicated. Conversely, a polyp which is associated with abnormal bleeding should be removed under anesthesia and accompanied by a thorough curettage.

An increasingly common indication for dilatation and curettage is a positive Papanicolaou smear. When this occurs, without evidence of cervical abnormality, a fractional curettage should be performed with incidental conization. A more radical procedure such as hysterectomy is never justified on the evidence of a single positive smear, and every attempt should be made to find the source of the atypical cells.

Another diagnostic possibility, unfortunately often overlooked, is that of combining dilatation and curettage with abdominal pelvic exploration. This is particularly important when there is any associated irregular vaginal bleeding. If dilatation and curettage are performed prior to laparotomy, a final pelvic evaluation may be made before performing an abdominal exploration. In the process the cervix is observed and abnormalities are treated intelligently. Practically every practicing gynecologist has seen patients upon whom subtotal hysterectomies were performed for bleeding which later proved to have been cervical in origin. Hendricks¹ has recently reported 6 cases of this type.

When the indication for hysterectomy is a myomatous uterus, with symptoms of bleeding, it does not always mean that bleeding is due to the myoma; neither does it preclude the presence of associated carcinoma of the endometrium. When a diagnosis of carcinoma is thus made, or when suspicion regarding its presence exists, further operative procedure should be suspended.

Primary hysterectomy is not the treatment of choice in corpus carcinoma. Instead, preliminary irradiation followed in 6 weeks by total hysterectomy and bilateral salpingo-oophorectomy is generally accepted as more satisfactory therapy. Pelvic examination at best is inexact and only through constant determined effort can skill be attained. There is no better way to test the accuracy of palpation than by examination immediately followed by laparotomy.

In dealing with the problems of infertility, it is possible to establish the presence or absence of ovulation in the current cycle—providing proper timing is observed. Dilatation and curettage should be carried out on the first day of the menstrual period in these cases. It is preferable to endometrial biopsy in many instances since it provides more complete information.

Dilatation and curettage has been suggested for the evaluation and treatment of dysmenorrhea. In carefully selected cases this is a valuable procedure and one which should be initiated as a therapeutic measure before attempting intra-abdominal intervention. It is particularly of value in those cases of primary dysmenorrhea which are refractory to medical therapy.

Dilatation and curettage is a generally accepted therapeutic measure in treating retained products of conception and pregnancy complications such as moles.

Method

Much of the reluctance to perform a dilatation and curettage is due to shortage of hospital beds. Many patients object to the necessary time loss and the expense involved in hospitalization. These objections can be overcome by performing the examination as an in-and-out procedure, without danger of increased morbidity and without unusual complications. Patients at the Cleveland Clinic Hospital are operated upon under pentothal and gas-oxygen anesthesia, and discharged when fully recovered. The operation can be performed on Friday or Saturday and the patient is able to return to work the following Monday morning. If complications arise during the procedure or if carcinoma is suspected, she may be admitted for observation. Perineal shaving is omitted prior to dilatation and curettage and usually only a thorough perineal and vaginal preparation with aqueous zephiran or merthiolate is used. By this procedure discomfort is reduced considerably.

Our method consists of a preliminary examination under anesthesia, followed by sounding of the cervix to confirm the uterine position and depth of the cavity. The cervix is then carefully dilated with a Wylie dilator and the largest curet which the cervix will admit is employed. The cavity is scraped systematically, inserting the curet the full depth of the uterus, holding it against the wall and completely withdrawing it. This maneuver is repeated in similar manner until the whole cavity has been thoroughly covered. Scrubbing motions should be avoided, since this tends to fragment the endometrial tissue and make satisfactory diagnosis more difficult. A sponge is placed in the vagina posterior to the cervix to collect the specimen which is immediately transferred to a specimen bottle and covered with fixative.

The larger the curet employed the more complete will be the coverage of the cavity while the danger of perforation will be decreased. When the cervix is adequately dilated caution must be observed in covering the entire cavity of the uterus as an unusually small carcinoma may easily escape detection. Polyps, too, may be overlooked.

Contraindications and Complications

The presence of acute cervical lesions or vaginitis are contraindications, since pelvic inflammatory disease may be a sequela. The chronically infected cervix can be treated by means of preliminary conization, thereby eliminating the infection and decreasing the chance for infectious material to enter the uterine cavity. A preliminary conization also makes dilatation of the cervix easier. There have been objections to dilatation and curettage associated with cervical procedures, but Crossen² has demonstrated the value of the procedure by discovering 8 cases of carcinoma of the endometrium at the time of conization.

Lacerations of the cervix may occur when forceful dilatation is employed. Perforation of the uterus is not an infrequent complication despite precaution and awareness of its possibility. Predisposing factors are inadequate preliminary cervical dilatation, too small or too large a curet, a large, boggy uterus (as evidenced in instances of incomplete abortion), or a uterus with soft spots (such as one containing an area of carcinoma). The curet should be held like a pencil, to minimize further the chances of perforation.

When perforation occurs, one should suspend further attempts at curettage and return the patient to bed. If there is evidence of excessive bleeding into the peritoneal cavity, laparotomy should be performed to repair the hole in the uterus. Evidence of infection should be treated with appropriate antibiotic measures although prophylactic chemotherapy may occasionally be employed. A further complication of perforation occurs when a small piece of bowel is drawn into the uterus with a curet. This, of course, necessitates laparotomy. The vast majority of perforations result in no remarkable complications, hence further procedure is unnecessary.

When care and thoroughness are exercised, dilatation and curettage provide one of the most informative gynecologic procedures, entailing a minimum of risk and secondary disability.

References

1. Hendricks, C. H.: Supracervical hysterectomy and carcinoma of cervix. *J.A.M.A.* **146**:100 (May 12) 1951.
2. Crossen, R. J.: Wide conization of cervix. *Am. J. Obst. and Gynec.* **57**:187 (Jan.) 1949.