ROLE OF DILATATION AND CURETTAGE AND INTERPRETATION OF ENDOMETRIAL BIOPSY IN GYNAECOLOGICAL CASES

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3 JO Cases of diagnostic D and C were collected randomly from Gynae unit of Lady Reading Hospital Peshawar from January 1990 to January 1991. These were cases of infertility> 49.26 %, menorrhagia 13.22 %, irregular bleeding 29.67 %, Postmenopausal bleeding 5.16 %, primary' and secondary' infertility 30.96 % and 18.38 % respectively. Various aspects like age, parity, marital status, clinical features and histopathological results were analysed.

6.45 % were below the age of 20 years. 63.22 % between 21 to 40 years, 25.16 % between 40-50 years and 5.16 % were above the age of 50 years. 16.45 % patients were nullipara.

15.48 % Primiparae and 37.09 % and 30.96 % were multipara and grand multipara respectively. 0.64 % patients were un-married, 84.83 % were married and 40.51 % were widows. Results of endometrial biopsies were as follows. Proliferative phase 47.74 %. secretory' phase 35.48 %. tuberculous endometritis 1.93 %, cystic endometrial hyperplasia 8.38 %, Adenomatous hyperplasia 1.29 % and adenocarcinoma 0.96 %.

INTRODUCTION

One of the most frequently performed gynecological operation is dilatation and curettage of the uterus. Endometrium is the mucus lining of the uterus. During reproductive life it undergoes cyclical physiological, morphological and biochemical changes. These cyclical changes classically called proliferative, secretory and menstrua] phases are controlled by fluctuating levels of ovarian hormones, namely oestrogen and progesterone.

Dilatation and curettage is done for both diagnostic and therapeutic purposes. In this series only diagnostic aspect is analyzed. Hysteroscopy and pelvic ultrasonography are increasingly being used to seek the causes of abnormal uterine bleeding[3]. Hysteroscopy and hysteroscopically directed endometrial biopsy can be performed as an outpatient procedure under local anaesthesia and general analgesia[3]. These days in developed countries simple D&C has been replaced by hysteroscopy and guided endometrial biopsy. Unfortunately, we do not have the facilities of hysteroscopy and patients with abnormal uterine bleeding are evaluated by conventional D&C.

SUBJECTS AND METHODS

310 cases of diagnostic dilatation and curettage have been collected from Gynaecology department of PGMI, LRH, Peshawar, Pakistan. Various aspects like menorrhagia, irregular bleeding, post-menopausal bleeding and infertility and their results are analysed

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The patient is prepared for vaginal operation in usual way. Vulva and vagina is cleaned with antiseptic solution and draped. Operation is performed in lithotomy position.

ANAESTHESIA

Operation is usually performed under general anaesthesia intravenous thiopentone sodium (Pentothal) 250-500 mg is given. Operation may be performed under paracervical block if the patient is not fit for general anaesthesia. Zupi et al[14] have proposed the use of topical endometrial anaesthesia by injecting local anaesthetic into the uterine cavity for hysteroscopy and endometrial biopsy, it seems to reduce the pain during procedures and prevent the occurrence of vasovagal attack.

TECHNIQUE OF D AND C

A Sim's speculum is introduced in to the vagina and the cervix is exposed. The anterior lip of the cervix is held with Volsellum forceps and drawn down and cleaned with chlorhexidine solution (Hibbi Scrub).

A uterine sound is passed and length of the cavity is measured. Cervix is then dilated upto Hagar's 8. Curette is introduced and curettage is performed. A useful routine is to start at 12 'O' clock position and work round the cavity clock wise[9].

FRACTIONAL CURETTAGE

Dilatation and fractional curettage is a definitive procedure for diagnosis of endometrial carcinoma.

And also to establish the stage of endometrial carcinoma or to distinguish it from an endometrial cancer.

1. First specimen is obtained by curetting the endocervix before the cervical canal is dilated. This specimen is labelled as no. 1.

2. The cervical canal is then dilated and a sharp curette is introduced upto the isthmus and this area is curetted. This specimen is no .2
3. The fundus of the uterus is then explored at each cornu and these specimens are labelled No.3A right and No.3 B left.
4. The anterior and posterior surfaces of the uterus are finally explored and these specimens are labelled separately. Six separate curettings are obtained and fixed in formalin.

Endocervical curettage is also utilized to detect endocervical carcinoma. But it depends upon the adequacy of the specimen. Hysteroscopy and hysteroscopically directed endometrial biopsy of the suspicious area is superior to fractional curettage, and should be performed in all patients suspected of endometrial carcinoma[7].

In present study fractional curettage was performed in 6 cases and endometrial carcinoma was found in 3 of them. A study was performed by Thomas *et.al*[11] to determine the utility of prehysterectomy endometrial sampling on 619 patients. The diagnostic capabilities of dilatation and curettage, the Vabra aspirator and the Novak curette were compared. The results confirmed the need of endometrial sampling for patients with abnormal uterine bleeding at 35 years of age or older.

Endometrial samples can be taken by endometrial biopsy, aspiration curittage, aspiration biopsy and endometrial cytology.

All 310 cases included in this series were dealt by dilatation and curettage because we do not have facilities for outpatient aspiration biopsies and aspiration curettage. 10% of the endometrial lesions may be missed by traditional D and C since D and C is a blind procedure. Hysteroscopy is valuable in the diagnosis and location of solitary lesions of malignant potential[10].

COMPLICATIONS OF DILATATION AND CURETTAGE

1. Complication of anaesthesia.
2. Laceration of the cervix.
3. Perforation of the uterus (The incidence of perforation of the uterus during dilatation and curettage has been calculated to be 1 in 500).
4. Sepsis is rarely a risk if proper aseptic technique is not observed or there is infection in the lower genital tract. In such cases it may take the form of peritonitis.

PROCESSING OF BIOPSY

Endometrial samples are sent to laboratory with an information proforma that includes basic data such as age of the patient, last menstrual period, complete menstrual history, Symptoms and treatment given.

FIXATION OF ENDMETRIAL BIOPSY SPECIMEN

Curetted endometrium is immediately placed in fixative (Buffered neutral formalin). The container is properly labelled and given a number that is transcribed on an information proforma.

RESULTS

The results after collection and tabulation of the data are given in tables 1-6. Table-1 shows number of cases according to the age. Table-2 shows incidence according to parity. Table-3 shows the number and percentage of patients with different clinical presentations. Table-4 gives the grouping of patients according to their marital status. Table-5 shows results of biopsy. Table-6 gives results of endometrial biopsy in infertile women

TABLE-1: AGE INCIDENCE

Age Group	No. of cases	%
00—20 Years	20	6. 45
21—40 Years	196	63.22
40—50 Years	78	25.16
> --50 Years	16	5.16

TABLE -2: INCIDENCE ACCORDING TO PARITY

Parity	No. of cases	%
Nullipara	51	16.45
Primipara	48	15.48
Multipara	115	37.09
Grand Multipara	96	.30.96

TABLE-3: CLINICAL PRESENTATION

CLINICAL PRESENTATION	No. of cases	%
Menorrhagia	41	13.22
Irregular bleeding	92	29.67
Post-menopausal bleeding	16	05.16
Post abortal bleeding	09	02.90
Primary infertility	96	30.96
Secondary infertility	57	18.38

TABLE-4: MARITAL STATUS

MARITAL STATUS	NO. OF CASES	%
Un-married	02	0.64
Married	263	84.83
Widow	45	14.5

TABLE-S: RESULTS OF BIOPSY

RESULTS OF BIOPSY	CASES (N)	%
Proliferative Phase	148	47.74
Secretory Phase	110	35.48
Chronic endometritis	006	01.93
Hydatidiform Mole	006	01.93
Placental tissue	004	01.27
Arias-Stella reaction	001	00.32
Cystic hyperplasia	026	08.38
Adenomatous hyperplasia	004	01.29
Adeno Carcinoma	003	00.96

TABLE-6: RESULTS OF ENDOMETRIAL BIOPSY IN INFERTILE WOMEN

INFERTILITY (TOTAL CASES 153)	NO. OF CASES	%
Secretory Phase	96	62.74
Proliferative Phase	50	32.67
Tuberculous endometritis	06	03.92
Cystic hyperplasia	01	00.65

DISCUSSION

Dilation and curettage of the uterus is done for the evaluation of following conditions

1. Menstrual disorders.
    a. Menorrhagia.
    b. Irregular bleeding.
    c. Dysfunctional bleeding.
    d. Post-menopausal bleeding.
    e. Postpartum or post-abortal bleeding.
    f. Oligomenorrhoea or amenorrhea.
2. Infertility.

Dilatation and curettage is of accepted value in the diagnosis of endometrial pathology in post-menopausal women. In present series there were 16 cases 5.16 % of post-menopausal bleeding. Every case of post-menopausal bleeding should have endometrial curettage because endometrial carcinoma is very common in this age group. After the age of 80 cancers is responsible for 56-60 % of cases[8].

The diagnostic D and C is commonly performed in pre-menopausal women mostly for menstrual disorders. Coulter et al[3] suggest that it is in this group of women that dilatation and curettage is over used as a diagnostic tool. In a study conducted by Hammond et al[16] on 365 premenopausal women diagnostic D and C was done for menstrual disturbances, they concluded that dilatation and curettage has an important role in the diagnosis of endometrial pathology in women of age 40 or more. But it is not necessary as a initial procedure in women less than 40 years as pathology is so uncommon. In present series

cystic hyperplasia was found in 26 cases 8.38 % and adenomatous hyperplasia in 4 patients and adenocarcinoma in 3 patients. In cases of dysfunctional uterine bleeding D and C is performed to rule out any endometrial pathology and this has some therapeutic effect because when all the endometrium is curetted bleeding stops temporarily[1].

Endometrial biopsy was taken in 153 cases of infertility to find out whether ovulation has occurred or not.

Biopsy is taken premenstrualy. Day 21 serum progesterone level for the detection of ovulation is superior to endometrial biopsy.

As the incidence of endometrial tuberculosis is quite high in our country so we routinely take premenstrual endometrial biopsy in all infertile women. In present series we have detected 8 cases of endometrial tuberculosis among 153 patients of infertility.

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