

M A T E R I A L & M E T H O D

MATERIAL & METHODS

The present study was conducted in the Department of obstetrics and gynaecology and Post Graduate Department of Pathology, Maharani Laxmi Bai Medical College & Hospital, Jhansi.

Subject of study were cases who had undergone tubal sterilization either on this hospital or elsewhere by;

- 1) Laproscopic Ligation.
- 2) Abdominal Ligation.

Selection of Cases:

Cases were selected from :-

- 1) Gynaecological out patient department who came with specific menstrual complaints or as a routine follow up.
- 2) Patient admitted in the wards.

Clinical History:

Detailed history of each patient was taken regarding.

- * Age.
- * Parity.
- * Type of Ligation (Abdominal Or Laproscopic)

- * Time of ligation it was;
 - a) Puerperal
 - b) Interval
 - c) Done with MTP
 - d) Done with Caesarian Section.

- * Source of Motivation;
 - a) Self
 - b) Social Worker
 - c) For Incentive
 - d) By Doctors

- * Indication of Ligation;
 - a) Multiparity
 - b) Multiparity with Economic Reason.
 - c) Medical Reasons.

- * Psychological Attitude of the Patient towards Ligation;
 - a) Satisfied
 - b) Unsatisfied
 - c) Indifferent.

- * Time Interval between Ligation and Davelopment of Menstrual Irregularity;
 - a) With in One Year
 - b) With in One to Three Years
 - c) More than Three Years.

Types of Menstrual Irregularities.

Menstrual History

Menstrual history was asked in detail before and after sterilization operation, regarding;

- 1) Length of the Cycle
- 2) Duration of Flow
- 3) Amount of Flow
- 4) Pain during Menstruation
- 5) Intermenstrual Bleeding
- 6) Last Menstrual Period.

Past History

- 1) For Diabetes Mellitus
- 2) Hypertension
- 3) Tuberculosis
- 4) Any other Chronic Illness

Treatment History

Patient was also asked about the treatment given in the form of hormonal treatment to control any menstrual irregularity.

General Examination

This included the general built of the patient, weight, Pallor, Edema, Pulse, Blood Pressure etc.

Systemic Examination

A thorough systemic examination was done to exclude any systemic disease because some of them may be directly responsible for the changes in menstrual pattern.

Perspeculum and Pervaginal Examination

These examination were done to see any local pathology and finding were entered in the performa.

Patients with any known pre existing pelvic or systemic condition or using steroidal contraceptive or IUCD were excluded from the study.

Endometrial Biopsy

Endometrial biopsy was taken in premenstrual phase in patients having abnormal menstrual pattern to study the type of hormonal disturbance.

The patients who were having continuous bleeding per vaginum, curetarge was done during the period and in those cases who were having irregular pattern, it was shown on first day of menstrual cycle.

Instrument Used

- * Sponge holding forceps
- * Catheter

- * Sims Speculum
- * Anterior Vaginal wall retractor
- * Volsellum
- * Uterine Sound.
- * Endometrial Biopsy Curette.

Preservative

Absolute Alcohol or 40% Formalin solution.

Stain

Haematoxylin and Eosin.

Method

It was an out door procedure patient was put in lithotomy position vulva was painted by sponge holding forceps. Bladder was catheterised in those cases where it was not evacuated already. Bimanual pelvic examination was done to ascertain the position of the Uterus and to exclude any pathology of the uterus adevexa. Sims speculum was inserted and the cervix was visualised with the help of an anterior vaginal wall retractor. The anterior lip of the cervix was caught by a volsellum. Uterine sound was passed to know the length of the uterine cavity. Endometrial biopsy was taken by means of endometrial biopsy eurette the tissue obtained was preserved in absolute alcohol or 40% formaline. Local antiseptic was applied over cervix

Preparation of tissue for histopathological examination.

The tissue was processed through varying concentration of alcohol then cleared by passing through Zylol. Blocks were made by embedding it in molten paraffin which was allowed to set. The section were then cut and fixed on slide before staining with ehrliche haematoxylin and eosin stain as discribed by Lilliequst (1953) the slides were examined under high power and endometrium was than phassed finally clinical and histopathological findings were correlated.

Vaginal Smear

In this lateral vaginal wall scraping is taken vaginal smear was taken in patients who were having menstrual disorders. It is done to study the type of hormonal disturbance.

Material Used

- * 2 glass slides.
- * One pair of dry sterilized gloves.
- * A wide mouth bottle or Jar in which slides be kept after taking smear.

Preservative

50% ether solution and 50% absolute alcohol.

Stain

Pap stain - It consists of 3 dye solution
 1) Haematoxylin staining the nucleus, 2) Orang G,
 3) A mixture of Bismath brown, Eosin Yellow and light green.

Method

It was an out door procedure, patient was put in to dorsal position. No Antiseptic solution is applied to the vulva or vagina. With the help of a dry glove the index finger is inserted into the vagina. The specimen obtained from the lateral vaginal wall. Light uniform scrapings are spreaded over the Dry glass slide and it was preserved in 50% solution of ether & 50% absolute alcohol in a Jar so that the Material obtained not dried. It is staining by the classical papanicolaou method for an accurate evaluation and permanent record.

The permanent preparation allows a complete evaluation of the endocrine change.

Maturation Index

The Maturation Index is a concise and objective method for gaining insight regarding the endocrine milieu. This expresses conveniently the level of cellular maturation attained at the time of exfoliation as a delicately changing ratio.

A differential of the three major types of cells shed from the stratified squamous epithelium of lateral vaginal wall, is expressed as percentages present of parabasal, the intermediates and the superficial cells.

This order Parabasal/Intermediats/Superficial the Nomenclature used for these three major types of cells shed from squamous epithelium is the international nomenclature which was informally agreed upon in 1958. The MI of a patient exfoliation no parabasal cells, 55% intermediate cells & 45% superficial cells is written 0/55/45 and accurately reflects their ratio on the surface of her vaginal epithelium in order to parabasal & superficial.

A shift to the left denotes less mature cells being released (exfoliated) whereas a shift to the right indicate more mature cells. Arrows written over the MI may be used to more clearly indicate the direction and degree of the maturation shift (i.e. $0/55 \overset{\rightarrow}{/} \overset{\leftarrow}{45}$).

Estrogen produces superficial cell maturation (MI to right, towards $0/0/100$).

A moderate degree of this effect is noted at ovulation. MI ($0/40 \overset{\rightarrow}{/} \overset{\leftarrow}{60}$).

Progesterone causes intermediate cell maturation (MI to midzone, toward $0/100/0$). A moderate degree of this effect is noted at menstruation (MI, $0/70/30$). Lack of cell maturing factor's or repression of their effect, causes no maturation beyond parabasal cells at exfoliation (MI to left towards $100/0/0$).

PROFORMA OF CASE

1. Case Number
2. Name
3. Age
4. Address
5. Type of ligation - Abdominal / Laproscopy
6. Time of Ligation - Pureperal / Interval / With MTP
with Caesarian Section.
7. Indication of Ligation - Multiperity / Multiparity with
Economic condition/Medical Advise.
8. Source of Motivation - Self/ Social Worker/ Doctor/ For
Incentive.
9. Psychological attitude towards Operation. - Satisfied / Unsatisfied/Indifferent.
10. Complication - With Menstrual Symptoms
Without Menstrual Symptoms.
11. Time Interval - 1 Year/1-3 Years/ More than 3 Years.
between ligation.
12. Menstrual History- Before Operation /After Operation.
Length of Cycle/Duration of Flow/Amount of Flow/ Pain/
Intermenstrual Bleeding/ Last Menstrual Period.
13. Obstetric History- Parity
 - Abortion
 - Last Child Birth

14. Treatment History - Medical
 - Surgical
15. Past History - Diabeties mellitus
 - Hypertension
 - Tuberculosis
16. Examination: A) General - Pulse
 - Blood Pressure
 - Pallor
 - Ictrus
 - Oedema
- B) Systemic - Heart
 - Lungs.
17. Perabdomen Examination.
18. Pervaginal Examination.
19. Perspeculum Examination.
20. Investigation - Routine - Hemoglobin %
 - Urine | - Albumin
 - Sugar
21. Endometrial Biopsy - Date
 - Biopsy Number
22. Vaginal Smear - Date
 - Smear Number.