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MATERIAL AND METHODS

Two hundred cases were selected as per MTP act for termination of pregnancy between 12-20 weeks of pregnancy, and were admitted in the department of Gynaecology and Obstetrics at M.L.B. Medical College, Jhansi during the period of May 1981 to April 1982.

Age, marital status, race, religion, address were recorded. The group included both nulliparous and multiparous. All patients were screened by history and physical examination prior to hospital admission and particular attention was paid for cardiovascular, respiratory and renal condition. Patients having associated or co-incidental medical condition were first referred for appropriate medical consultation. Thereafter a detailed clinical history of the cases was taken including age, parity, relevant present and past history.

**History of present pregnancy :-**

The date of last menstrual period was correctly noted and history of present pregnancy including even the slightest complication was recorded.

**Past History :-** The history of all possible complications of pregnancy and labour during previous pregnancies were recorded.

**Examination of the patients :-** A thorough general and systemic examination was done.
Abdominal examination: Abdominal examination for fundal height and for correlation of the fundal height with period of amenorrhoea and for localisation of foetal parts was done.

Pervaginal examination: Bimannual examination was carried out for assessment of size of the uterus. Routine admission lab work included total and differential blood counts, Hb percentage & urine analysis. Grouping and cross-matching was carried out for all grand multiparous and for patients with history of uterine surgery. The patients were divided into 3 groups.

Group I - For Hysterotomy
Group II - For Intraamniotic Devices
Group III - For Extraamniotic Devices

Group I mainly consisted of multipara who were tubectomised along with. The patients were hospitalised throughout the procedure.

AMNIOCENTESIS

Amniocentesis is the insertion of a needle into the amniotic cavity.

Technique: Abdominal Route.

Preliminary Procedure

Amniocentesis may be safely undertaken as an outpatient procedure without premedication of the patient. The patients were told about the procedure and the reasons for it and were given the opportunity to ask questions so that anxiety was minimized. Many authorities consider that placental localisation is desirable prior to amniocentesis to reduce the risk of needle injury to the placental separation.
However, in the present study area between foetal arms and legs and the area of the nape of foetal neck were used as sites for insertion of the needle without prior placental localization.

**Equipment & Materials Required**

The tray for the amniocentesis procedure normally contains the following.

1) One 18 gauge spinal needle (length 3.5"-6") depending upon the obesity of the patient.

2) One pair of sponge holding forceps.

3) Sterile swabs and sponges.

4) Small abdominal towel.

5) Antiseptic solution and container.

6) Sterile 20 ml, 2 syringes.

7) Appropriate bottles to receive specimens.

**Preparation of Site**

The patient is asked to void urine. She is then made comfortable in the dorso-recumbent position on an examination bed with the head and shoulders slightly elevated to promote relaxation of the abdominal muscles. The abdomen is then gently palpated to determine the size of the uterus and height of the fundus. The area between the foetal arms and legs and the area of the nape of the foetal neck are the most suitable sites for insertion of the needle. Abdominal scars are avoided as tissue in such an area is difficult to traverse and there is the chance of encountering adherent intestine or omentum.
Procedure: Having selected the puncture site, the operator and the attendant wear masks and caps and the operator scrubs and puts on sterile gown and gloves. The patients abdomen is prepared with antiseptic solution and the sterile abdominal towel. It is unnecessary to use local anaesthetic infiltration of the puncture site before insertion of the amniocentesis needle.

It is essential to use very sharp needle. The needle with stylet is passed with a quick thrust through the abdominal walls into the amniotic cavity at a selected site. The average depth of insertion required is 3-4 cms. Usually a sensation of ‘give’ is obtained as the needle point enters the amniotic cavity. The stylet is removed from the needle and if placement has been successful, amniotic fluid may flow up through the needle. The twenty ml. syringe is now attached to the hub of the needle and (while being careful not to disturb the position of the needle) an attempt is made to aspirate the fluid. Depending on the period of gestation clear liquor ranging from 50-200 ml was removed. Depending upon the drug chosen (20% saline 40% urea solution, 2.5 mg (10 ml) carboprost tromethamine, efortin or distilled water) the same amount were instilled directly by syringe. In patients chosen for I/A efortin only 10 cc liquor was removed. After successful aspiration of the fluid the needle is quickly withdrawn and the puncture site covered with sterile dressing.
Pulse chart was maintained. A pair of laminaria tent were inserted in all patients. Five injections of spartin sulphate were given to all patients at ½ hrly interval commencing immediately after instillation. The patients were allowed to labour spontaneously. Those who remained undelivered 72 hours after the procedure were considered failures. They were surgically evacuated later. Operative procedure, induction, abortion interval and operative complications were noted. All foetuses were examined and a few placenta examined histopathologically.

During labour analgesics were given to patients on request. Fasting before drug instillation was discouraged and regular diet was maintained. If digital removal of placenta failed, sedatives were given to patients intramuscularly before instrumental removal was attempted.

Postpartum patients were discharged not less than six hours after an uncomplicated complete delivery. On discharge the patients were advised prophylactic antibiotics. The patients were advised to come for a follow up and family planning advice if needed, weekly, for 3 weeks.

Reagents :-
1) 20% Saline
2) 40% urea prepared by dissolving 80 gms fresh urea powder in 200 ml. distilled water. It was then autoclaved.
3) Distilled Water
4) Carboprost tromethamine (2.5 mg)
5) Efcollin (400 mg)

Extraamniotic Route: For extraamniotic injection of emcridil
45 patients were selected between 12-20 weeks gestation. The
instillation was carried out in operation theatre. The
patient was put in lithotomy position. Part was painted and
draped. Anterior / and posterior vaginal walls were retracted.
Anterior lip of the cervix was caught with a volsellum. A
foleys Catheter No 16 was put for about 15-20 cm through
cervix in Uterine Cavity. The bulb of Catheter was inflated
with 10-20 cc of distilled water. About 50-150 ml (depending
on period of gestation) of emcridil was instilled within 10
minutes. The other end of catheters was folded and tied,
augmentation with unitoctin 5 ampoules at 6 hourly interval was
done. Re-instillation was done in cases if and when required.
The patients were discharged 6 hrs after abortion and asked to
come for follow up visits weekly for 3 weeks.

In 20 cases termination was carried out simply by
Catheter. The procedure was same as above with the difference
that the no. of Catheters ranged from 2-3 and no dye was
injected spartin sulphate was used 5 amp. ½ hrly starting
immediately after inserting the Catheter. Curettage was carried
out if when required. All foetuses were examined and a few
placenta histopathologically examined.
The patients were discharged 6 hrs. post partum and were asked to come for follow up visit weekly for three weeks.

HYSTEROTOMY

In 45 cases hysterotomy was carried out.

Procedure:

Anaesthesia - General or spinal anaesthesia was given.
- Abdomen was painted and draped.
- It was opened by a paramedian incision in layers.
- Uterus was visualised
- A vertical incision was then made low in the midline of the uterus.
- The wound was enlarged with fingers.
- Sac was ruptured.

The foetus along with placenta was removed manually.
- Gentle Curettage of the cavity was done.
- Intravenous methergin 1 ampoule was injected intravenously simultaneously.
- Uterus was closed in two layers.
- Peritonium was stitched.
- Abdominal toilet was done.
- Abdomen was closed in layers.
- Vaginal toilet was done.
- Dressing was done
- All foetuses were examined.
- Stitches were removed on the 7th Day
- The patients were kept on antibiotics throughout this period.
- They were discharged after removal of the stitches on the 7th day and were asked to come for a follow up visit weekly for three weeks.