In the name of Allah

The most gracious, The most merciful

Clinical Guideline

To

Obstetrics and Gynaecology

Editors:

DR. MD. MEHEDI HASAN LEMON
MBBS (Mymensingh Medical College,M-48) **BCS** (Health)
FCPS Part-1 (Medicine) **PGT** (Medicine)
CCD (BIRDEM) **DMU** (BITMIR)
Medical Officer, Ministry of Health and Family Welfare
Ex-Honorary Medical Officer, Mymensingh Medical College Hospital
Ex-Medical Officer, BSMMU

DR. KAMRUN NAHAR PINKY
MBBS (Mymensingh Medical College,M-48) **BCS** (Health)
FCPS Part-1 (Gynaecology and Obstetrics) **MS** (Gynaecology and Obstetrics)-Phase A
Medical Officer, Ministry of Health and Family Welfare
Resident, Bangabandhu Sheikh Mujib Medical University (BSMMU)

CONTENTS

HISTORY AND EXAMINATION

GYNAECOLOGY

A good detailed history is always useful for correct gynaecological diagnosis. While taking history the following information should be obtained.

Particulars of the patient:

Name:
Age:
Marital status:
Occupation:
Religion:
Address:
Date and Time of Admission:
Date and time examination:

Chief complaints:

The following common gynaecological complaints are:

1. Disturbance in menstrual cycle
2. Vaginal discharge
3. Pain in the lower abdomen
4. Swelling or mass in the lower abdomen
5. Something coming out per vagina
6. Post menopausal bleeding
7. Failure to conceive
8. Difficulty in micturation
9. Difficulty in defaecation

History of present illness:

It includes the elaboration of the present complaints. If the patient complaints about the irregularities of menstrual cycle, the following questions should be asked for:

1. For how long she has menstrual irregularities.
2. Duration of menstrual cycles.
3. Amount of menstrual bleeding.
4. Duration of menstrual period.
5. Date of last menstrual period.
6. Painful menstruation.

Vaginal discharge: The following points should be asked.

1. Amount: Scanty or copious
2. Colour: White, yellow, greenish, blood stained
3. Odour:Odourless or offensive
4. Consistency:Watery or thick
5. Associated with pruritus
6. Relationship with menstruation, pregnancy or oral pill

Lower Abdominal Pain: The following questions are to be asked.

1. Site of pain
2. Duration of pain
3. Onset of pain – (sudden / gradual)
4. Severity of pain – (mild, moderate or severe)
5. Nature of pain – (colicky or continuous)
6. Radiation of pain
7. Relationship of pain to – Menstruation , coitus , micturation, defaecation.
8. Any vaginal bleeding or discharge.

Mass in lower abdomen: Following question should be asked:

1. Duration of abdominal mass.
2. Rapidity of growth
3. Whether the is mass painful or not
4. Menstrual history.

Something coming out of vagina: Following questions should be asked.

1. Duration of symptoms
2. Parity of the patient
3. Menstruating or menopausal
4. Relation and mode of delivery
5. Micturating and defaecation problem
6. Vaginal discharge.

Post menopausal bleeding: She should be asked about.

1. Duration of bleeding
2. Amount of bleeding

Menstrual History: (In case of Gynaecological case write it after presenting illness)

Age of Menarche: 13 years

MP/MC: 5 / 28 (±2) days

Menstruation: Regular/Irregular

Menstrual flow: Average

Dysmenorrhoea:

1st day of LMP:

EDD:

Obstetric History: (In case of Obstetric case write it after presenting illness)

Married for:
Para:
Gravida:
Age of last child/Last pregnancy outcome:
Obstetric chart:

Sl N0	Pregnancy				Labour			Puerperium	Baby			
	Year of deliverey	Duration	ANC	Normal/ Complication	Place	Mode	Normal/ complication	N/C	Sex	Status	Fee ding	Immuni zation

HISTORY AND EXAMINATION

OBSTETRICS

Particulars of the patient:

Name:

Age:

Marital status:

Occupation:

Religion:

Address:

Date and Time of Admission:

Date and time examination:

Chief complaints:

The patient may complain of the following:

1. Amenorrhoea (expressed in weeks of gestation)
2. Other symptoms of pregnancy like –
    a. Nausea
    b. Vomiting
    c. Frequency of micturation
    d. Constipation
    e. Mild rise of temperature
    f. Heaviness in the breast
    g. Vertigo
3. Pain in the abdomen.
4. Bleeding in pregnancy both early and late.
5. Less foetal movement.
6. Vaginal discharge with or without itching.
7. Watery discharge per vagina.

Problems are to be recorded in order of priority or by chronological onset of events.

History of Present illness:

According to statement of the patient she is pregnant for about ..... weeks. She was regularly menstruating woman. Accordingly her LMP was on ..... and her EDD will be on ..... which was confirmed by early Ultrasonogram at .....weeks. She was duely immunized against Tetanus. She had regular/no antenatal check up and her antenatal period was uneventful/ eventful ....

Her bowel and bladder habit is normal. With above complain she got admitted to hospital for better managment.

PRE-ECLAMPSIA

Particulars of the patient:

Name: Mahiya Mahi

Age: 26 years

Occupation: Housewife

Religion: Islam

Address: Gouripur, Mymenshingh.

Date and time of admission: 01.05.17

Date and time of examination: 03.05.17

C/C:

1. Pregnant for 34 weeks
2. Swelling over the ankle for 20 days.

H/O Present illness:

According to statement of the patient, she is pregnant for 34 weeks. She was regularly menstruating woman. Accordingly her LMP was on ..... and her EDD will be on ..... which was confirmed by early Ultrasonogram. She was duely immunized against Tetanus. It was her planned pregnancy.She had regular antenatal check up and had normal blood pressure. But for last 20 days she has noticed swelling over the ankles which persists all day and didn't resolve after taking rest. Then she consulted a doctor and the doctor found high BP (if possible mention) and advised her to admit in hospital. Her foetal movement is good. She has no history of headache, blurring of vision, epigastric pain or vomiting. Her bowel and bladder habit is normal. With above complain she got admitted to hospital for better managment.

Obstetric History:

Married for:

Para:

Gravida:

Age of last child/Last pregnancy outcome:

Obstetric chart:

Sl N0	**Pregnancy**				**Labour**			**Puerperium**	**Baby**			
	Year of delivery	**Duration**	**ANC**	**Normal / Complication**	**Place**	**Mode**	**Normal/ complication**	**N/C**	**Sex**	**Status**	**Feeding**	**Immunization**

Menstrual History:

Age of Menarche: 13 years

MP/MC: 6/ 28 (±2) days

Menstruation: Regular/Irregular

Menstrual flow: Average

1st day of LMP:

EDD:

Contraceptive history:

Practiced: Condom

Last use: Before …(Date)

History of past illness: She has no history of

-DM

-HTN

-Rhematic heart disease

- Renal disease

- Thyroid disorder

- Any Chronic illness.

Drug History: She had taken calcium and iron tablet irregularly, couldn't mention the dose and duration

Family History: All members of her family enjoy good health

Personal History: Non-Smoker

Immunization History: She has got TT vaccine in full dose.

Socio-economic history: Middle income

GENERAL EXAMINATION:

Appearance: Normal

Body built: Average

Co-Operation: Co-Operative

Nutritional status: Average

Anaemia: +

Jaundice: Absent

Oedema: **++**

Cyanosis: Absent

Pulse: 80/min

BP: 150/100 min

RR: 16/ min

Temperature: 99^0F

Dehydration:-

Breast examination: Not done (Or, shows normal pregnancy changes)

Thyroid gland: Not enlarged

Bed side heat coagulation test: +

SYSTEMIC EXAMINATIONS:

Per-abdomen:

Inspection:

- ✓ Abdomen is uniformly enlarged, umbillcus is centrally placed
- ✓ Stria gravidarum, linea nigra present

Palpation:

Symphysiofundal height: 36 weeks which corresponds to gestational age or Reduced.

Fundal grip: According to presentation

Lateral grip: According to presentation

Pelvic grip: According to presentation

Auscultation: Foetal heart rate 140/min and regular

Pelvic examination: Not done

Other system examination: NAD

Salient feature:

Mrs. Mahiya Mahi, 28 years of age, para:...+...., primi gravida, muslim housewife, non-smoker, hailing from Gouripur, Mymensingh, admitted to this hospital at ... am/pm on... (date) at her 34 weeks of pregnancy with the complaints of swelling over the ankle for 20 days. She was regularly menstruating woman. Her LMP was on..... and her EDD will be on..... which was confirmed by early Ultrasonogram. She was duely immunized against Tetanus. It was her planned pregnancy.She had regular antenatal check up and had normal blood pressure. But for last 20 days she has noticed swelling over the ankles which persists all day and didn't resolve after taking rest. Then she consulted a doctor and the doctor found high BP (if possible mention) and advised her to admit in hospital. Her foetal movement is good. She has no history of headache, blurring of vision, epigastric pain or vomiting. Her bowel and bladder habit is normal. With due consent and maintaining adequate privacy,I examined her on .... (date) at ....am/pm and found her anxious but cooperative.She is mildly anaemic, pulse 80/min, BP 150/100 mm of Hg, RR 16/min, temperature 99^0F. There is no sign of dehydration and having oedema (++). Bed side heat coagulation test positive. On examination per abdomen, abdomen is uniformly enlarged, SFH corresponds to her gestational age or reduced. There is a single fetus (position according to presentation). FHR is 150 bpm and regular. Pelvic examination not done and other system examination reveals no abnormality. With above complain she got admitted to hospital for better managment.

Provisional diagnosis: Primigravide 34 weeks pregnancy with pre-eclampsia.

Investigations:

1. CBC (Hb%, platelet count)
2. Blood grouping and Rh typing
3. RBS
4. S. urea, creatinine
5. **Hepatic enzymes:** S. AST, ALT, LDH
6. **Coagulation profile:** Serum fibrinogen level, PT and APTT
7. Bedside heat coagulation test

8. Urine RME
9. USG of pregnancy profile

Treatment:

1. **Hospitalization**
2. **Rest**:In left-lateral position as much as possible to lessen the effects of vena caval compression.
3. **Diet:**
   - ✓ Adequate amount of daily protein (about 100 gm).
   - ✓ Usual salt intake is permitted.
   - ✓ Fluids need not be restricted.
   - ✓ Total calorie approximate 1600 cal/day.
4. **Antihypertensives: e.g. Labetalol, Methyl-dopa**
5. **Sedation:** Tab. Phenobarbitone 30mg
6. **Obstetric management:**

   Depends on:
   1. Severity of pre-eclampsia
   2. Duration of pregnancy,
   3. Response to treatment
   4. Condition of the cervix

   A. If maternal condition & response to treatment are satisfactory: Continue pregnancy upto term and termination to be done accordingly

   B. If maternal condition & response to treatment aren't satisfactory: Terminate pregnancy irrespective of gestational age.

   Methods of Delivery:
   1. Induction of labor
   2. Cesarean section

PRE-ECLAMPSIA

Definition:

Pre-eclampsia is a multisystem disorder of unknown etiology characterized by developmentof hypertension to the extent of 140/90 mm Hg or more with proteinuria after the 20th week in a previouslynormotensive and nonproteinuric woman.

[Dutta's obstetrics-9th-207]

New definition:

Pre-eclampsia is a multisystem disease process of unknown etiology characterized by rise SBP ≥140 mm of hg and/or DBP ≥90 mm of hg on 2 occassions at least 4 hours apart with significant protenuria after 20 weeks pregnancy in a previously normotensive and non-protenuric woman.

Why pre-eclampsia is a multisystem disorder?

Due to presence of

1. Thrombocytopenia
2. Hepatic dysfunction
3. Pulmonary oedema
4. Cerebral symptoms
5. Visual symptoms

[Dutta's obstetrics-9th-212]

Causes of preeclamptic features before the 20th week:

1. Hydatidiform mole
2. Acute polyhydramnios

[Dutta's obstetrics-9th-207]

Risk factors for pre-eclampsia:

1. **Primigravida**: Young or elderly (first time exposure to chorionic villi)
2. **Family history**: Hypertension, pre-eclampsia
3. **Placental abnormalities**:
   - ✓ Hyperplacentosis: Excessive exposure to chorionic villi e.g. in molar pregnancy twins, diabetes
   - ✓ Placental ischemia
4. **Obesity**: BMI >35 kg/M2, Insulin resistance.

5. **Pre-existing vascular disease**
6. **New paternity**.
7. **Thrombophilias:**
    - ✓ Antiphospholipid syndrome
    - ✓ Protein C, S deficiency
    - ✓ Factor V Leiden

[Dutta's obstetrics-9th-208]

Clinical types: Clinical classification is dependent on the level of BP for management purpose. Proteinuria is more significant than blood pressure to predict fetal outcome.

2 types-

1. **Mild:**
    - ✓ Sustained rise of BP of more than 140/90 mm Hg but less than 160 mm Hg systolic **or**
    - ✓ 110 mm Hg diastolic without significant proteinuria.
2. **Severe:**
    a. A persistent systolic blood pressure of >160 mm Hg or diastolic pressure of >110 mm Hg.
    b. Protein excretion of >5 gm/24 hr.
    c. Oliguria (<400 ml/24 hr).
    d. Platelet count < 100,000/mm3.
    e. HELLP syndrome.
    f. Cerebral or visual disturbances.
    g. Persistent severe epigastric pain.
    h. Retinal hemorrhages, exudates or papilledema
    i. Intrauterine growth restriction of the fetus.
    j. Pulmonary edema.

    From the prognostic point of view, a diastolic rise of blood pressure is more important than the systolicrise.

[Dutta's obstetrics-9th-211]

Management:

History:

- ✓ **Primigravidae** (70%).
- ✓ **Obstetrical–medical complications:** More often associated with. Such as-
    - ➢ Multiple pregnancy

- Polyhydramnios
- Pre-existing hypertension, diabetes etc.

- ✓ **Clinical manifestations:** Usually after the 20th week, usually insidious onset, rarely rapid course.

Symptoms:

Mild symptoms:

Edema:

- ✓ Slight swelling over the ankles which persists on rising from the bed in morning or tightness of ring on the finger.
- ✓ May extend gradually to the face, abdominal wall, vulva and even the whole body.

Alarming symptoms: ***(severe pre-eclampsia)***

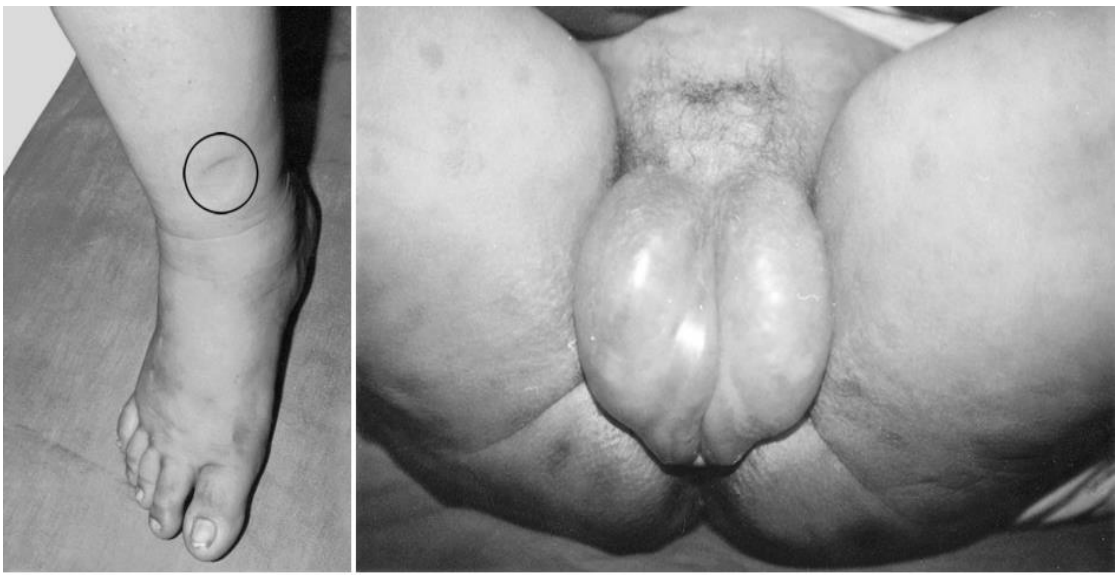
1. **Headache:** Either located over the occipital or frontal region
2. **Disturbed sleep**
3. **Diminished urinary output**: Urinary output of less than 400 ml in 24 hours is very ominous
4. **Epigastric pain**:
   - ✓ Acute pain in the epigastric region
   - ✓ **Associated with vomiting**: At times coffee color, is due to hemorrhagic gastritis or due to subcapsular hemorrhage in the liver,

5. **Eye symptoms**: Due to spasm of retinal vessels (retinal infarction), occipital lobe damage (vasogenic edema) or retinal detachment.
   - ✓ Blurring
   - ✓ Scotomata
   - ✓ Dimness of vision, at times complete blindness.

[Vision is usually regained within 4–6 weeks following delivery. Reattachment of the retina occurs following subsidence of edema and normalization of blood pressure after delivery.

Signs:
General examination:

1. **Abnormal weight gain:** Rapid gain of weight of more than 4lb a week in later monthsof pregnancy is significant.
2. **Rise of BP**: The diastolic pressure usually tends to rise first followed by the systolic pressure.



3. Edema:

- ✓ Visible edema over the ankles on rising from the bed in the morning is pathological.
- ✓ Sudden and generalized edema may indicate imminent eclampsia.

Systemic examination:

1. **Abdominal examination:** May reveal evidences of chronic placental insufficiency, such as scanty liquor or growth retardation of the fetus.
2. **CVS and renal:**No manifestationof chronic cardiovascular or renal pathology.
3. **Respiratory system:**
   Pulmonary edema: Due to leaky capillaries and low oncotic pressure.
   Investigations:
   1. CBC
   2. Blood grouping & Rh typing
   3. Serum creatinin and Blood urea
   4. Serum electrolytes
   5. SGPT, Billirubin
   6. Urine for protein
   7. Bedside clotting test
   8. **USG** of pregnancy profile

[Dutta's obstetrics-9th-212-13+Lecture of MMC]

Treatment:

1. **Hospitalization**
2. **Rest**:In left-lateral position as much as possible to lessen the effects of vena caval compression.
3. **Diet:**
   - ✓ Adequate amount of daily protein (about 100 gm).
   - ✓ Usual salt intake is permitted.
   - ✓ Fluids need not be restricted.
   - ✓ Total calorie approximate 1600 cal/day.
4. **Antihypertensives:**
   - ✓ **Methyl-dopa:** Central and peripheral anti-adrenergic action
   - ✓ **Labetalol:** Adrenoceptor antagonist (α and β blockers)
   - ✓ **Hydralazine:** Vascular smooth muscle relaxant
   - ✓ **Nifedipine:** Calcium channel blocker
5. **Diuretics**: **Frusemide**(IV is preferred, oral can be given)
   - ✓ **Should not be used injudiciously** [May harm to the baby by diminishing placental perfusion and by electrolyte imbalance]
   - ✓ **Compelling reasons for its use:**
     - ➢ Cardiac failure
     - ➢ Pulmonary edema
     - ➢ Along with selective antihypertensive drug therapy (diazoxide group) where blood pressure reduction is associated with fluid retention
     - ➢ Massive edema, not relieved by rest and producing discomfort to the patient.
6. **Sedation:** Tab. Phenobarbitone 30mg
7. **Obstetric management:**

   Duration of treatment Depends on:

   a. Severity of pre-eclampsia
   b. Duration of pregnancy,
   c. Response to treatment
   d. Condition of the cervix

   A. If maternal condition & response to treatment are satisfactory: Continue pregnancy upto term and termination to be done accordingly

   B. If maternal condition & response to treatment aren't satisfactory: Terminate pregnancy irrespective of gestational age.

   Methods of Delivery:

   1. Induction of labor
   2. Cesarean section

[Dutta's obstetrics-9th-214-17+Lecture of MMC]

GENITOURINARY FISTULA

Particulars of the patient:

Name: Farzana

Age: 28years

Marital status: Married

Occupation: Housewife

Religion: Islam

Address: Mymensingh

Date and Time of Admission:

Date and time examination:

Chief complaints:

1. Continuous dribling of urine for one year.
2. No urge to pass urine.
3. Itching at the vulva.

History of present illness:

According to statement of the patient, she was suffering from continuous dribling of urine for one year following difficult vaginal delivery. She noticed dribbling of urine about one week following delivery of dead baby. The labour was prolonged and difficult and was conducted at home by an untrained dai. Since then she has no desire to pass urine. She is also suffering from vulval itching. Bowel bladder habit is normal. With this above situation she has got admitted to MMCH for better management.

INSTRUMENTS

SIM'S DOUBLE BLADED VAGINAL SPECULUM

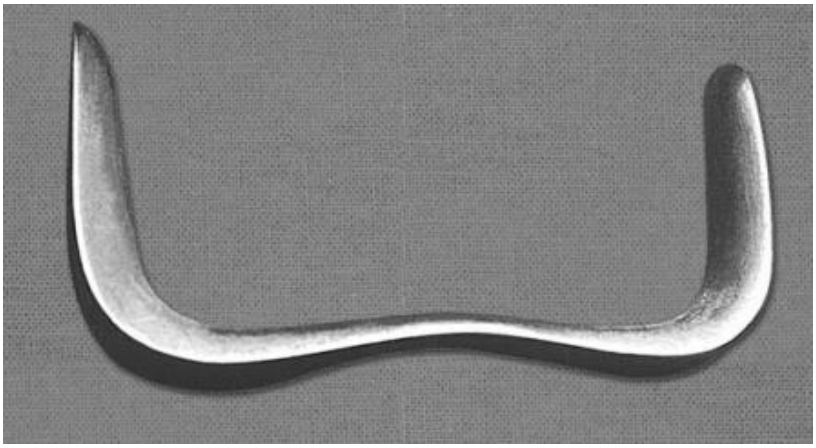


Figure: Sim's double bladed vaginal speculum

Identify the instrument.

Sim's double bladed vaginal speculum

Identifying points:

1. Having one blade on either side with handle between them.
2. Blades are of unequal size.
3. Groove along the length of instrument

Structures examined with this instrument: Vaginal wall and cervix

Why are the blades of unequal sizes?

- ✓ To facilitate its introduction into the vagina.
- ✓ Narrow blade in nulliparous and the wider blade in parous women where more space is available.

Sizes:

1. Small
2. Medium (Most commonly used)
3. Large

Different position examination with this instrument:

1. Dorsal position
2. Sim's position
3. Lithotomy position
4. Knee- chest position
5. Trendelenburg position

Uses**:**

Gynaecological:

1. **Vaginal operations:** D + C, D + E, anterior colporrhaphy, vaginal hysterectomy, etc. to retract the posterior vaginal wall.
2. To visualize the cervix
3. Inspect the abnormalities in the anterior vaginal: Cystocele, VVF or Gartner's cyst
4. To collect the materials from the vaginal pool: For cytology or Gram stain and culture.

Obstetrical:

1. Repair of cervical tear
2. To visualize any injury in cervix or vaginal wall during PPH
3. Dx of PROM

Sterilization: Autoclaving, boiling

Contraindications of use:

1. Pregnancy
2. Pelvic infection

Disadvantages / drawbacks of the instruments:

1. Needs assistant
2. Patient must be on the edge of the bed during examination

OXYTOCIN

Figure: Inj. Oxytocin

Identification: This is an ampoule of oxytocin containing 5 units in 2 ml.

Natural source: Posterior pituitary extract

Mode of Action:

1. Oxytocin acts through receptor and voltage mediated calcium channels to initiate myometrial contractions.
2. Stimulates amniotic and decidual prostaglandin production.
3. The uterine contractions are physiological i.e. causing fundal contraction with relaxation of the cervix.

Indications/Uses:

1. Abortion
2. Hydatiform mole
3. Induction of labour
4. Augmentation of labour
5. PPH
6. Oxytocin sensitivity test
7. Oxytocin challenge test

Scenario:

A pregnant lady presents at her 34 weeks of gestation with lower abdominal pain and PV bleeding. O/E uterus is hard and contracted.

Diagnosis: Abruptio placentae

Mx of abruptio placentae:

Clinical feature:

1. Vaginal bleeding
2. PV bleeding
3. Abdominal pain
4. Uterine tenderness and often with a dead fetus.

Investigations:

1. Hb%
2. Blood grouping and Rh typing
3. USG

Treatment:

General management:

1. Complete bed rest
2. IV access
3. IV fluid: Hartman solution or normal saline, **replace blood**
4. If Shock: Resusciate as necessary - IV fluids, oxygen

Definitive management:

A. **Heavy bleeding:** Termination of pregnancy
   1. **CS:** If delivery is not imminent
   2. **NVD:** If delivery is imminent (Expedite by VE/Forceps)

B. Light/moderate bleeding:

1. **CS:**
   - ✓ Foetus alive / distressed
   - ✓ Term / near term
   - ✓ Delivery not imminent
   - ✓ Unsatisfactory progress of labour
2. **Vaginal delivery:**
   - ✓ Foetus dead or too premature when maternal condition is stable cooperatively
   - ✓ Bleeding stops after ARM

DERMOID CYST OF OVARY

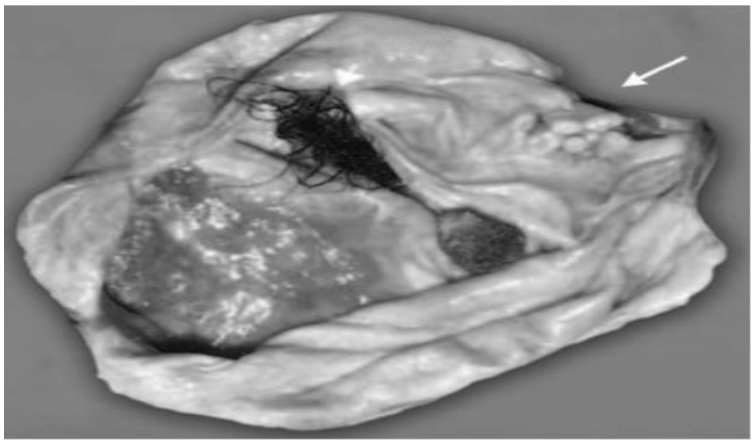


Figure: Dermoid cyst of ovary (Cut section showing hair and teeth)

Identify the supplied specimen/ photograph.

Dermoid cyst

What type of tumour is it?

Benign ovarian tumour.

Characteristics features of this tumour:

1. Capsule is thickened
2. Cystic in nature
3. Shows hair

Complications if not treated:

1. Torsion of the pedicle (axial rotation)
2. Intracystic hemorrhage
3. Infection
4. Rupture
5. Pseudomyxoma peritonei
6. Malignancy

Treatment options:

1. If size is small <18 cm – cystectomy.
2. If size is large >18 cm – Oophorectomy or Salpingo- Oophorectomy.
3. In case of menopausal lady - Hysterectomy and bilateral salpingo-oophorectomy

PARTOGRAPH

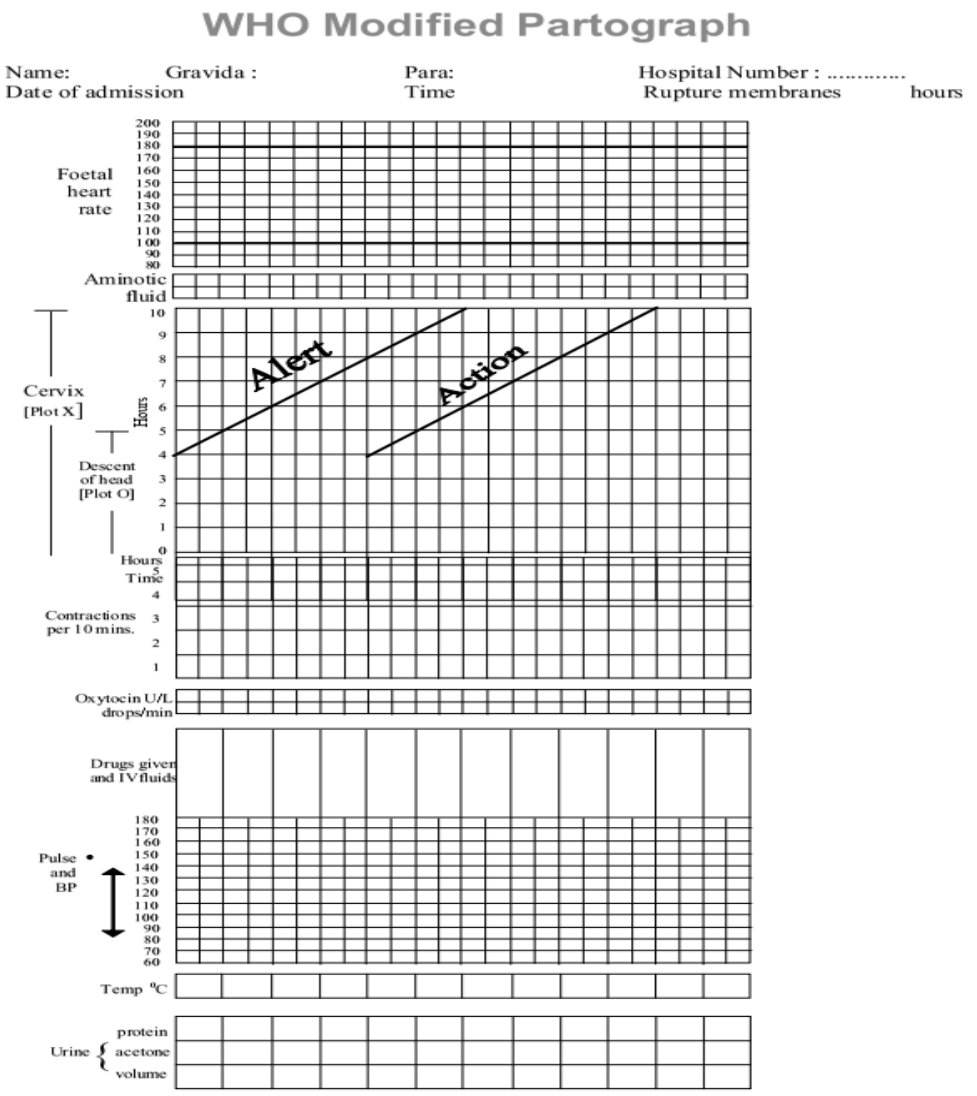


Figure: Partograph

What is Partograph?

Partograph is a composite graphical record of key data (maternal and fetal) during labour, entered against time on a single sheet of paper.