# **Contents**

SECTION I: OBSTETRI	CS	1-370
	aking and Clinical Examination	
	Ty	
	ination	
	etric Examination	
	al Puerperium	
1.5	artum Exercises	
Chapter 2: Obstetric	Case Discussions	16–119
	-1 Normal Pregnancy	
■ Case	-2 Primigravida with Floating (Free) Head at Term	26
■ Case	-3 Normal Puerperium	31
■ Case	-4 Puerperium Normal and Abnormal	37
■ Case	-5 Pregnancy and Labor in a Woman with	
	Prior Cesarean Delivery	41
	e–6 Anemia in Pregnancy	
■ Case	-7 Diabetes in Pregnancy	54
■ Case	-8 Breech Presentation	59
■ Case	-9 Prolonged Pregnancy	65
■ Case-	-10 Fetal Growth Restriction	68
■ Case-	-11 Pre-Eclampsia and Eclampsia	72
■ Case-	12 Pregnancy with Maternal Red Cell Alloimmunizati	on80
■ Case-	-13 Multiple Pregnancy	86
■ Case-	14 Intrauterine Fetal Death	93
■ Case-	15 Polyhydramnios	96
	16 Antepartum Hemorrhage (Placenta Previa)	
	17 Abruptio Placentae (Accidental Hemorrhage)	
	18 Postpartum Hemorrhage—Prevention	
	and Management	
■ Case-	19 Hemorrhage in Early Pregnancy	113
■ Case-	20 Miscarriage (Spontaneous Abortion)	117
Chapter 3: Single Be	st Answers and Multiple Choice Questions	120-164
Chapter 4: Labor and	d Delivery	165-215
	nal Pelvis	
	Skull	
	anism of Labor	
	echanism of Normal Labor	
	-Normal, Vaginal Delivery and Management	
	eterm Labor and Delivery	
	elabor Rupture of Membranes (PROM)	
	-Abnormal	
	alposition and Malpresentation	
F 1910	41203111011 4114 MAIDIE3EII(4(1011	1 70

	Occiput Posterior Position (OP)	198
	➤ Breech Presentation	202
	> Face Presentation	206
	➤ Brow Presentation	209
	> Transverse Lie	209
	> Cord Prolapse	210
	> Compound Presentation	211
	➤ Unstable Lie	212
	Prolonged (Protracted) Labor	212
	Obstructed Labor	214
Chapter 5: A	ctive Management of Labor	216–234
<u> </u>	Labor Monitoring—Partography	217
	Intrapartum Electronic Fetal Monitoring—	
	Cardiotocography	229
Chapter 6: 0	bsterics Short Questions	235–256
Chapter 7: 0	perative Obstetrics	257–278
	Dilatation and Evacuation (D and E)	258
	Suction Evacuation	259
	Manual Vacuum Aspiration (MVA)	260
1	Episiotomy	261
1	Forceps Delivery	263
•	Ventouse Delivery	268
	Cesarean Section	269
	Destructive Operations	277
Chapter 8: Pr	actical Obstetrics	279–337
	Obstetric Instruments	280
	Specimens	312
1	I Imaging Studies	316
	> Ultrasonogram	316
	➤ Magnetic Resonance Imaging (MRI)	323
	Drugs in Obstetrics	324
	> Oxytocics	324
	> Antihypertensives	331
	> Anticoagulants	333
	> Anticonvulsants	333
	> Tocolytic Drugs	336
Chapter 9: M	aternal Health: India and Global Scenario	338–358
•	material mortality natio (mining, material mortality	
	Rate and Lifetime Risk	
	Sustainable Development Goals (SDG 3)	344
	willer in Development Godis (WDG 4 and 5) and	
<u></u>	Sustainable Development Goals (SDGs)	345
	National Health Mission (NHM) and Reproductive and Child Health-II (RCH-II)	240
	and child dealth in the Dall	348

	Contents
■ Janani Shishu Suraksha Karyakram (JSSK) a Government	
of India (GOI) Scheme	350
■ Maternal Health Beyond 2030	357
Chapter 10: Drug Therapy, Charts, Illustrations and Medications	359–370
■ Drug Therapy in Pregnancy and Teratogenicity	360
Obstetric Charts and Graphs	
■ Critical Periods in Embryonic Development	
SECTION II: GYNECOLOGY	371-693
Chapter 11: Gynecology Case Discussion	272 //22
■ Case – 1 Fibroid Uterus	
Case – 2 Ovarian Tumor	
<ul> <li>Case – 3 Pelvic Organ Prolapse</li> <li>Case – 4 Genitourinary Fistula</li> </ul>	
Case – 4 Genitournary Fistura      Case – 5 Ureteric Injury in Gynecology	
Case – 6 Rectovaginal Fistula	
Case – 7 Old Complete Perineal Tear	
Case – 7 Old Complete Permear Tear      Case – 8 Pelvic Infections	
Case – 9 Genital Tuberculosis	
Case – 10 Abnormal Uterine Bleeding (AUB)	
Case – 11 Hydatidiform Mole	
Case – 12 Uterine Polyp	
Case – 13 Infertility	
Chapter 12: Special Topics	433-456
■ Physiology of Menstruation	
Polycystic Ovarian Syndrome	
Ovulation Induction	
■ Endometriosis	
■ Cervical Intraepithelial Neoplasia (CIN)	
■ Amenorrhea	
Chapter 13: Gynecology Short Questions	457-474
Chapter 14: Viva-Voce in Gynecology	475-495
■ Gynecology Questions and Answers	476
Chapter 15: Operative Gynecology	496-546
■ Dilatation and Curettage	
■ Dilatation of Cervix	
■ Dilatation and Insufflation (Rubin's Test)	
<ul> <li>Hysterosalpingography</li> </ul>	
■ Cervical Biopsy	
■ Thermal Cauterization of the Cervix	
<ul> <li>Marsupialization of a Bartholin's Cyst</li> </ul>	
■ Female Sterilization (Tubectomy)	505

-	Amputation of Cervix	507
=	Fothergill's Operation	508
•	Operations on the Ovary	509
-	Abdominal Hysterectomy	509
-	Myomectomy	516
•	Vaginal Hysterectomy	519
-	Anterior Colporrhaphy	523
-	Colpoperineorrhaphy	523
-	Large Loop Excision of Transformation Zone	525
-	Radical Hysterectomy	526
-	Endoscopic Surgery in Gynecology	528
-	Robotics in Gynecology	545
Chapter 16: Pr	actical Gynecology	547–649
	Gynecology Instruments	
-	Specimens	
=	Imaging Studies in Gynecology	626
	> Hysterosalpingogram (HSG)	
	➤ Ultrasonography (USG)	
	> X-ray	640
	> CT scan	
	> MRI	643
	Drugs in Gynecology	
	➤ Clomiphene Citrate	645
	> Letrozole	645
	> Danazol	645
	> Progesterone	646
	<ul> <li>Combined (Estrogen and Progesterone) Oral</li> </ul>	
	Contraceptive Preparations (COC)	646
	> Tranexamic Acid	648
	➤ Mifepristone	648
	➤ Metformin	649
	➤ Methotrexate	649
	> Cisplatin/Carboplatin	649
Chapter 17: Sin	ngle Best Answer and Multiple Choice Questions	650–688
Chapter 18: Hi	story in Obstetrics and Gynecology	689-693
The second secon	Eponyms in Medicine	690
	Party Pine Control of the	

### **HISTORY**

#### **PATIENT PARTICULARS**

Name: Mrs	
Age: years	Address:
Occupation:	• Religion:
<b>Educational status:</b>	<ul> <li>Occupation of the husband:</li> </ul>
Duration of marriag	ge: • Socioeconomic status:
Gravida:	<ul> <li>Date of admission:</li> </ul>
Parity:	<ul> <li>Date of examination:</li> </ul>
Married for (in a ca	se of primigravida):
LMP E	DD Period of gestation in weeks
be recorded, in order of Some patients may not like raised blood pressu	abdomen/headache/vaginal bleeding/urinary problems are to spriority or according to chronological order of onset of events. have any complaints but have been admitted for observation are (BP), or for investigations and planning mode of delivery as immunization or pregnancy with prior cesarean delivery.
	ess: Elaboration of the chief complaints as regard to their onset, of medications, investigations, and progress, is to be made.
present pregnancy (if ar (ii) 2nd trimester and (ii (booking status), immu Any medication or rad	gnancy: Important complications of different trimesters of the by) are to be recorded carefully. Complications of (i) 1st trimester, i) 3rd trimester should be mentioned. Number of antenatal visits inization status, intake of iron and folic acid are to be recorded. Sation exposure in early pregnancy or medical/surgical events all be enquired and recorded. Woman's perception of fetal entioned.
Obstetric history (Box	1.1): Previous obstetric events are to be recorded chronologically.
This is relevant in a mu	ltigravida. The obstetric history is summed up as:
Gravida MTP	Para and Living issue

			Box 1.1:	Obstetric hist	ory	
S. No.	Year and date	Pregnancy events	Labor events	Mode of delivery and the place	Puerperium	Weight and sex     Condition at birth (Apgar score)     Breastfeeding     Immunization

Menstrual history: Menarche (age)......years, cycle 28–30 days, duration 3–4 days; Amount of flow: (average/scanty), dysmenorrhea (if any).

LMP...... EDD...... (Naegele's formula); period of gestation...... weeks.

Corrected EDD (in cases with delayed menstruation or pregnancy following IVF):.....

Naegele's formula:

Due date of delivery = First day of last menstrual cycle + 9 months +7 days
For IVF pregnancy, date of LMP is 14 days prior to date of embryo transfers (266 days)

Past medical history: Any relevant past medical illness (malaria and jaundice).

Past surgical history: Previous surgery—general (appendicectomy) or gynecological (myomectomy).

**Family history:** Hypertension, diabetes, hemoglobinopathy, twinning or congenital malformation or consanguineous marriage is to be enquired and recorded.

**Personal history:** Contraceptive practice, smoking, chronic medications (corticosteroids), habit forming drugs are to be enquired. Sleep, appetite, bowel and bladder habits are to be mentioned.

## **EXAMINATION (FIGS. 1.1 TO 1.9)**

- General physical examination
- > Build
- Nutrition
- ➤ Height (Figs. 1.1 and 1.2)
- ➤ Weight (Figs. 1.1 and 1.3)
- > Pallor
- > Jaundice
- Cyanosis
- > Tongue, teeth, gum and tonsils
- Neck veins
- Neck glands
- > Thyroid
- > Breasts
- > Pulse
- Blood pressure
- Temperature
- > Respiratory rate
- Edema legs

#### Mental status

To assess whether the individual is alert, conscious and cooperative.

- Systemic examination
- Examination of cardiovascular and respiratory system:
  - Heart
  - Lungs
- Musculoskeletal system
- Examination of abdomen:
  - Inspection
  - Palpation

Any tenderness, liver, spleen (any organomegaly)

#### Obstetric examination:

- Inspection
- Palpation
- Obstetric grips
- Percussion (not done)
- · Auscultation for fetal heart sounds

#### Q. Discuss her labor progress observed after 4 hours of labor (12.00 hours).

- Ans. (1) Cervical dilatation: 6 cm dilated. But it has crossed the alert line.
  - (2) Fetal head: 3/5th brim, no descent of head since admission.
  - (3) Uterine contractions: 3/4 in 10 minutes time, each lasting for >40 seconds.
  - (4) FHR: >160 bpm (tachycardia) but coming down steeply upto 100 bpm (bradycardia) by the next hour.
  - (5) Liquor: Clear.
  - (6) Moulding: 2+.

**Comments:** Cervical dilatation increased by 2 cm over a period of 4 hours. For Mrs CL, it was much less (normally 1.5/h). Cervicograph is on the right side of the alert line. There is no change in the descent of the presenting part in spite of the fact that uterine contractions were adequate. Presence of tachycardia and bradycardia with moulding indicate adverse fetal response in relation to the progress of labor.

Ringer's solution was started to maintain her hydration and normal metabolic status.

## Q. Discuss the partograph as recorded during the course of Mrs CL's labor at 14.00 (2 pm).

- Ans. (1) Cervical dilatation: 6 cm. It has touched the action line
  - (2) Fetal head: 3/5th above the brim. No descent at all.
  - (3) Uterine contraction: 3-4 in10 minutes time each lasting ≥40 seconds.
  - (4) FHR: Significant bradycardia <110 bpm.
  - (5) Liquor: Meconium stained.
  - (6) Moulding: 3+.

Comments: Mrs CL had no further dilatation of the cervix since the last observation at 12 pm (2 hours) and there is no descent of the presenting part. Fetal bradycardia, moulding of the head, meconium-stained liquor were observed. Partographic analysis of labor revealed arrest of dilatation and descent in the active phase of labor despite adequate uterine contractions. This indicates labor is obstructed. Owing to this observation along with presence of fetal distress, labor was terminated. Cesarean delivery was performed at 2–10 pm.

# Q. How can you evaluate critically that partograph can reduce the problems of prolonged and obstructed labor?

Ans. See SAQ p. 243.

#### **Case Summary**

Mrs Bani Kumari, a 26-year-old primigravida was admitted in labor following a term pregnancy. Her partograph is shown in **Figure 5.4: Partograph 4.** 

- Q. Discuss the partographic observation of Mrs Bani at 10 am (Fig. 5.4 partograph 4).
- Ans. Cervix was 4 cm dilated
  - Uterine contractions were 2 in 10 minutes and each lasted less than 20 seconds

#### Identification data

Name: Mrs. Bani Pillai

W/o: Ramaraju Age: 26 years Parity: Primigravida Reg No.: 23780

Date and time of admission 11th march 2011, 10 am Date and time of ROM: 11th march 2011, 10 am

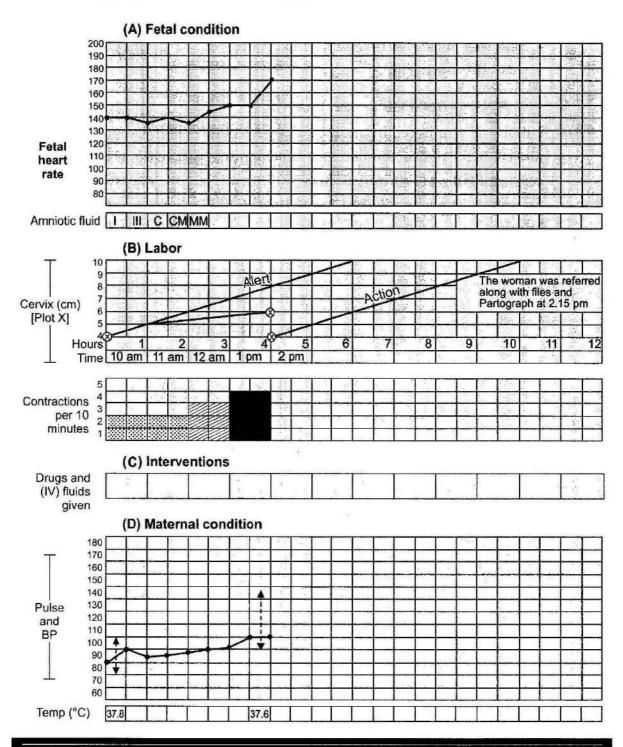


Fig. 5.4: Partograph 4.

- FHR was 140/min
- Blood pressure was 100/70 mm Hg
- Temperature was 37°C
- Pulse was 80/min.