
Contents



Preface

Acknowledgements

Introduction

PART 1: ORGANIZING THE DISTRICT HOSPITAL SURGICAL SERVICE

1 Organization and management of the district surgical service

- | | | |
|-----|--|------|
| 1.1 | The district hospital | 1-1 |
| 1.2 | Leadership, team skills and management | 1-2 |
| 1.3 | Ethics | 1-7 |
| 1.4 | Education | 1-9 |
| 1.5 | Record keeping | 1-13 |
| 1.6 | Evaluation | 1-15 |
| 1.7 | Disaster and trauma planning | 1-17 |

2 The surgical domain: creating the environment for surgery

- | | | |
|-----|--|------|
| 2.1 | Infection control and asepsis | 2-1 |
| 2.2 | Equipment | 2-4 |
| 2.3 | Operating room | 2-6 |
| 2.4 | Cleaning, sterilization and disinfection | 2-11 |
| 2.5 | Waste disposal | 2-13 |

PART 2: FUNDAMENTALS OF SURGICAL PRACTICE

3 The surgical patient

- | | | |
|-----|----------------------------------|-----|
| 3.1 | Approach to the surgical patient | 3-1 |
| 3.2 | The paediatric patient | 3-6 |

4 Surgical techniques

- | | | |
|-----|-----------------------------|------|
| 4.1 | Tissue handling | 4-1 |
| 4.2 | Suture and suture technique | 4-2 |
| 4.3 | Prophylaxis | 4-10 |

5 BASIC SURGICAL PROCEDURES

5.1	Wound management	5-1
5.2	Specific lacerations and wounds	5-5
5.3	Burns	5-13
5.4	Foreign bodies	5-16
5.5	Cellulitis and abscess	5-19
5.6	Excision and biopsies	5-30

PART 3: THE ABDOMEN

6 Laparotomy and abdominal trauma

6.1	Laparotomy	6-1
6.2	Abdominal trauma	6-4

7 Acute abdominal conditions

7.1	Assessment and diagnosis	7-1
7.2	Intestinal obstruction	7-2
7.3	Peritonitis	7-4
7.4	Stomach and duodenum	7-5
7.5	Gallbladder	7-8
7.6	Appendix	7-10

8 Abdominal wall hernia

8.1	Groin hernias	8-1
8.2	Surgical repair of inguinal hernia	8-2
8.3	Surgical repair of femoral hernia	8-6
8.4	Surgical treatment of strangulated groin hernia	8-8
8.5	Surgical repair of umbilical and para-umbilical hernia	8-9
8.6	Surgical repair of epigastric hernia	8-10
8.7	Incisional hernia	8-10

9 Urinary tract and perineum

9.1	The urinary bladder	9-1
9.2	The male urethra	9-6
9.3	The perineum	9-16

PART 4: EMERGENCY OBSTETRIC CARE

10 Hypertension in pregnancy

10.1	Hypertension	10-1
10.2	Assessment and management	10-3
10.3	Delivery	10-8
10.4	Postpartum care	10-8
10.5	Chronic hypertension	10-9
10.5	Complications	10-9

11 Management of slow progress of labour

11.1	General principles	11-1
11.2	Slow progress of labour	11-3
11.3	Progress of labour	11-9
11.4	Operative procedures	11-13

12 Bleeding in pregnancy and childbirth

12.1	Bleeding	12-1
12.2	Diagnosis and initial management	12-3
12.3	Specific management	12-6
12.4	Procedures	12-15
12.5	Aftercare and follow-up	12-35

PART 5: RESUSCITATION AND ANAESTHESIA

13 Resuscitation and preparation for anaesthesia and surgery

13.1	Management of emergencies and cardiopulmonary resuscitation	13-1
13.2	Other conditions requiring urgent attention	13-10
13.3	Intravenous access	13-11
13.4	Fluids and drugs	13-15
13.5	Drugs in resuscitation	13-18
13.6	Preoperative assessment and investigations	13-20
13.7	Anaesthetic issues in the emergency situation	13-27
13.8	Important medical conditions for the anaesthetist	13-36

14 Practical anaesthesia

14.1	General anaesthesia	14-1
14.2	Anaesthesia during pregnancy and for operative delivery	14-12
14.3	Paediatric anaesthesia	14-14
14.4	Conduction anaesthesia	14-21
14.5	Specimen anaesthetic techniques	14-25
14.6	Monitoring the anaesthetized patient	14-34
14.7	Postoperative management	14-45

15 Anaesthetic infrastructure and supplies

15.1	Equipment and supplies for different level hospitals	15-1
15.2	Anaesthesia and oxygen	15-5
15.3	Fires, explosions and other risks	15-11
15.4	Care and maintenance of equipment	15-12

PART 6: TRAUMATOLOGY AND ORTHOPAEDICS

16 Acute trauma management

- | | |
|--|------|
| 16.1 Trauma in perspective | 16-1 |
| 16.2 Principles of Primary Trauma Care | 16-2 |
| 16.3 Six phases of Primary Trauma Care | 16-3 |
| 16.3 Procedures | 16-8 |

17 Orthopaedic techniques

- | | |
|---------------------------------------|-------|
| 17.1 Traction | 17-1 |
| 17.2 Casts and splints | 17-6 |
| 17.3 Application of external fixation | 17-10 |
| 17.4 Diagnostic imaging | 17-12 |
| 17.5 Physical therapy | 17-13 |
| 17.6 Cranial burr holes | 17-15 |

18 Orthopaedic trauma

- | | |
|--------------------------------------|-------|
| 18.1 Upper extremity injuries | 18-1 |
| 18.2 The hand | 18-11 |
| 18.3 Fractures of the pelvis and hip | 18-14 |
| 18.4 Injuries of the lower extremity | 18-17 |
| 18.5 Spine injuries | 18-25 |
| 18.6 Fractures in children | 18-28 |
| 18.7 Amputations | 18-31 |
| 18.8 Complications | 18-33 |
| 18.9 War related trauma | 18-36 |

19 General orthopaedics

- | | |
|--|------|
| 19.1 Congenital and developmental problems | 19-1 |
| 19.2 Bone tumours | 19-4 |
| 19.3 Infection | 19-5 |
| 19.4 Degenerative conditions | 19-8 |

ANNEX

Primary Trauma Care Manual: Trauma Management in Remote and District Locations