

**CHAPTER ONE: INTRODUCTION TO TRAUMA CARE**

1. ——— are the leading cause of injury-related death.  
 A Firearm-related injuries      B Motor vehicle crashes      C Falls      D Homicides
2. Penetrating Abdominal ——— Index (PATI) is a scoring system designed to quantify the effects of penetrating abdominal injury.  
 A Traction      B Turn      C Tension      D Trauma

**CHAPTER TWO: PHYSIOLOGIC RESPONSE TO INJURY**

3. ——— is a complex process which attempts to maintain integrity of the vascular system.  
 A Coagulation      B Homeostasis      C Dilution      D Volume shifting
4. The primary function of ——— is wound healing.  
 A cytokines      B eicosanoids      C neutrophils      D macrophages

**CHAPTER THREE: AIRWAY MANAGEMENT AND ANESTHESIA**

5. Oral intubation requires at least ——— rescuers.  
 A four      B three      C two      D five
6. Percutaneous translaryngeal catheter insufflation is also known as “needle cric” or “——— ventilation”.  
 A jet      B hose      C tube      D puff

**CHAPTER FOUR: INITIAL ASSESSMENT AND RESUSCITATION**

7. Regarding trauma resuscitation, the definition of unstable will include patients who are considered metastable (the ———).  
 A state of extreme vital signs      B condition of low blood pressure      C capacity to change at any time      D state of remaining the same
8. With the unstable blunt trauma patient, a(n) ——— of the cervical spine is usually ordered to rule out gross deformity only.  
 A lateral      B odontoid view      C AP      D RAO

**CHAPTER FIVE: SHOCK**

9. Vasogenic ——— occurs when vascular resistance is lowered sufficiently to reduce perfusion pressure in peripheral tissue beds.  
 A reverse flow      B disintegration      C shock      D degeneration
10. Regarding the manifestations of shock, the “lethal triad” consists of ———, acidosis, and coagulopathy.  
 A rapid breathing      B hypoxia      C heat exhaustion      D hypothermia

**CHAPTER SIX: DAMAGE CONTROL SURGERY**

11. Acidosis is defined as a pH below 7.2 or base deficit exceeding:  
 A 8      B 7      C 6.5      D 6
12. Damage control techniques have survival rates around ——— overall and some series report higher survivals with penetrating injuries.  
 A 80%      B 60%      C 10%      D 40%

**CHAPTER SEVEN: BLOOD AND TRANSFUSION**

13. Approximately ——— million units of blood are transfused every year in the United States.  
 A 15      B 30      C 40      D 55
14. Patients with severe hypotension (BP < ——— mm Hg) attributable to hemorrhage should receive blood immediately.  
 A 70 to 80      B 80 to 90      C 100      D 40 to 50

**CHAPTER EIGHT: NUTRITIONAL INTERVENTION**

15. Mobilization of lipid stores (———) occurs after trauma.  
 A lipogenesis      B gluconeogenesis      C lipolysis      D glycolysis

16. The advent of total ——— nutrition (TPN) allowed the provision of complete nutritional support delivered by a central venous catheter.
- A parenteral                      B primary                      C pediatric                      D percentile

## CHAPTER NINE: PREHOSPITAL AND AIR MEDICAL CARE

17. Mass casualty triage involves prioritizing patients when needs exceed:
- A a greater than 25 patient wait    B federally set resource limits    C available resources    D predetermined resource limits
18. Under-triage (——) occurs when a patient who may benefit from trauma center is transported to a setting with fewer resources.
- A upside-down triage    B sufficient reverse    C negative transport    D false negatives

## CHAPTER TEN: TEAM ACTIVATION AND ORGANIZATION

19. A ——— provides initial evaluation and assessment of injured patients; typically located in small hospitals or clinics in remote areas.
- A Level I trauma center    B Level II trauma center    C Level III trauma center    D Level IV trauma center
20. It is not uncommon for radiographic studies to be performed concomitant with the trauma resuscitation.
- A True    B False

## CHAPTER ELEVEN: IMAGING OF TRAUMA PATIENTS

21. Standard two-dimensional angiography has been largely replaced by CT angiography in the diagnosis of vascular traumatic injury.
- A True    B False
22. Ideally, an erect chest film is obtained because the anatomic alterations caused by the supine position can simulate:
- A S/C joint separation    B disease    C a different body habitus    D A/C joint separation

## CHAPTER TWELVE: INTERVENTIONAL RADIOLOGY

23. Prompt uncomplicated access, usually ———, is a key initial step to angiographic intervention.
- A in the brachial artery    B transfemoral    C in the radial artery    D in the posterior tibial artery
24. Detectable extravasation must occur at ———, although CT may detect pooling contrast material being leaked at a much slower rate.
- A about 2.5 mL/min    B about 1.5 mL/min    C about 0.5 mL/min    D about 3 mL/min

## CHAPTER THIRTEEN: SEPSIS IN TRAUMA

25. Sepsis is a broad term including severe sepsis (infection complicated by acute organ dysfunction) and septic shock (——).
- A infection leading to shock    B infection leading to paralysis    C hypothermia leading to shock    D infection leading to death
26. The most common healthcare associated fungal infection is due to ——— species.
- A Klebsiella    B Influenza    C Escherichia coli    D Candida

## CHAPTER FOURTEEN: INFECTIONS, ANTIBIOTIC PREVENTION, AND ANTIBIOTIC . .

27. The incidence of infection following injury approaches:
- A 25%    B 15%    C 45%    D 5%
28. ——— is (are) the single most effective means to reduce the spread of infection.
- A Hand hygiene    B Proper use of surgical drapes    C Vaccinations    D Food Safety

## CHAPTER FIFTEEN: TRAUMA PAIN MANAGEMENT

29. ——— are the cornerstone of acute severe pain management.
- A Muscle relaxants    B Opioids    C NSAIDs    D Corticosteroids
30. ——— causes the least hemodynamic effects and is the agent of choice for pain relief during resuscitation.
- A Morphine    B Hydromorphone    C Propofol    D Fentanyl

## CHAPTER SIXTEEN: VENOUS THROMBOEMBOLISM

31. DVT affects > ——— million people each year in the United States.
- A .5    B 1    C 2.5    D .7

32. In symptomatic patients, duplex ultrasound provides a sensitivity and specificity greater than ---- for infrainguinal DVT.  
A 55% B 65% C 75% D 95%

### CHAPTER SEVENTEEN: OPERATING ROOM PRACTICE

33. A trauma OR table should be capable of radiography and fluoroscopy (i.e. ---- table).  
A Jackson B Perugia C Hamilton D Smith
34. A trauma OR table should have a minimum of ---- suction canisters.  
A three B four C seven D ten

### CHAPTER EIGHTEEN: DISASTERS, MASS CASUALTY INCIDENTS

35. A(n) ---- occurs when the local resources are unable to meet the needs of the event.  
A cataclysm B epidemic C disaster D mass casualty
36. Disaster Medical ---- Teams (DMATs) designed to be a rapid-response element to supplement local medical care.  
A Alert B Awareness C Assistance D Associative

### CHAPTER NINETEEN: INJURY PREVENTION

37. Over ---- of all US emergency department visits, almost 40 million in total, are related to injury.  
A one-tenth B one-third C one-eighth D one-fifth
38. A traditional public health model used to identify and tackle modifiable risk factors for injury includes hosts (----).  
A automobiles, firearms, knives B people and their risky behaviors C road signs, poor lighting, etc D high unemployment, etc

### CHAPTER TWENTY: REHABILITATION

39. Cardiovascular deconditioning occurs rapidly with any period of:  
A tachycardia B hypoxia C exertion D inactivity
40. Prevention of ulceration requires frequent turning of the patient, initially on a schedule of a minimum of every:  
A 2 hours B 4 hours C 8 hours D 12 hours

### CHAPTER TWENTYONE (A): TRAUMA IN CHILDREN

41. ---- remains the cause of more childhood (ages 1 to 14) deaths than all other childhood diseases combined.  
A Unintentional injury B Noncommunicable disease C Nutritional condition D Maternal condition
42. Head injury causes > ---- of pediatric trauma deaths.  
A 25% B 55% C 75% D 95%

### CHAPTER TWENTYONE (B): TRAUMA IN PREGNANT WOMEN

43. Trauma complicates 6% to 7% of all pregnancies and accounts for ----% of maternal deaths.  
A 22 B 70 C 30 D 46
44. Motor vehicle collisions (MVCs) account for ---- of all traumas in pregnant women.  
A 10% to 25% B 35% C 95% D 50% to 80%

### CHAPTER TWENTYONE (C): TRAUMA IN OLDER ADULTS

45. Decrease in renal cortex mass results in as much as ----% functional cortical loss.  
A 25 B 10 C 5 D 70

### CHAPTER TWENTYTWO: MECHANISM OF INJURY

46. MVCs cause at least ---- of closed head and spinal cord injuries.  
A one-tenth B half C one-third D one-fourth
47. Regarding lateral crashes, greater than ---- of intrusion on the occupant side signify a greater than 20% chance of significant injury.  
A 12 in. B 5 in. C 2 in. D 18 in.

## CHAPTER TWENTYTHREE: TRAUMATIC BRAIN INJURY

48. The ——— is the largest and most well developed portion of the brain.  
A cerebellum                      B pons                      C cerebrum                      D frontal lobe
49. The ——— doctrine states that the total volume of intracranial contents must remain constant because of the rigid bony cranium.  
A Jacobson                      B Hamilton                      C Pintorelli                      D Monro–Kellie

## CHAPTER TWENTYFOUR: MAXILLOFACIAL INJURY

50. A ——— is a good screening radiograph for most dentoalveolar trauma.  
A panorex                      B panrad                      C panphoton                      D panoria
51. In edentulous patients, the incidence of subcondylar fractures accounts for ——— of all mandible fractures.  
A 5%                      B 20%                      C 37%                      D 51%

## CHAPTER TWENTYFIVE: SPINAL CORD AND SPINAL COLUMN

52. The human spinal cord has ——— segments.  
A 12                      B 25                      C 31                      D 41
53. The sensitivity of plain cervical x-rays to detect fracture is low, showing a sensitivity of 52% versus ——— % for CT.  
A 60                      B 98                      C 71                      D 80

## CHAPTER TWENTYSIX: OPHTHALMIC INJURIES

54. Relative ——— pupillary defect (RAPD) is important in characterization of injury.  
A age-related                      B afferent                      C amblyopia                      D astigmatism
55. Of midface, supraorbital, or frontal sinus fractures, ——— % are associated with severe optic nerve injuries.  
A 12                      B 1                      C 23                      D 4

## CHAPTER TWENTYSEVEN: NECK TRAUMA

56. The neck is divided into zones in trauma situations. Zone II covers the area from the cricoid to angle of the mandible.  
A True                      B False
57. Regarding the plain cervical spine radiograph, pretracheal soft tissue thickness greater than ——— suggests cervical spine fracture.  
A 22 mm at C6                      B 14 mm at C3                      C 30 mm at C6                      D 7 mm at C3

## CHAPTER TWENTYEIGHT: THORACIC INJURIES

58. Thoracic injuries are responsible for approximately ——— % of all trauma deaths.  
A 8                      B 25                      C 32                      D 12
59. ——— chest usually results from direct high energy impact.  
A Pummel                      B Thompson's                      C Thrash                      D Flail

## CHAPTER TWENTYNINE: ABDOMINAL TRAUMA

60. Commonly injured abdominal organs are generally solid organs: liver, spleen, bowel mesentery, or kidney.  
A True                      B False

## CHAPTER THIRTY: GENITOURINARY INJURIES

61. Approximately 10% of trauma patients sustain a genitourinary (GU) injury, with the ——— most commonly involved.  
A urethra                      B ureter                      C kidney                      D bladder
62. Most (——— %) of the bladder injuries are associated with gross hematuria.  
A 83                      B 75                      C 95                      D 55

## CHAPTER THIRTYONE: ORTHOPEDIC TRAUMA, FRACTURES, AND DISLOCATIONS

63. Pediatric fractures are classified according to their physical (growth plate) involvement (Salter–Hatzburger classification).  
A True                      B False

64. Regarding classification of open fractures (Gustilo and Anderson), ——— involves moderate energy, > 1 cm with flap or avulsion wound.  
A Type IV                      B Type I                      C Type III                      D Type II

### CHAPTER THIRTYTWO: PERIPHERAL VASCULAR INJURIES

65. In urban trauma centers, peripheral vascular injuries are most commonly (——) caused by penetrating trauma.  
A 75% to 80%                      B 55%                      C 98%                      D 64%
66. Peripheral nerve injuries are present in up to ——— % of patients with extremity vascular trauma.  
A 50                      B 25                      C 43                      D 88

### CHAPTER THIRTYTHREE: BURNS / INHALATION INJURY

67. In severe burns (> —— % TBSA), it is optimal to obtain central venous access early before massive swelling and edema occur.  
A 10                      B 20                      C 30                      D 40
68. —— injury is the most frequent cause of death in thermal injuries.  
A Inhalation                      B Burn                      C Scald                      D Heat rupture

### CHAPTER THIRTYFOUR: PRIORITIES IN THE ICU CARE - ADULT TRAUMA PATIENT

69. Approximately —— of critically injured patients remain in the ICU for more than 72 hours.  
A one-half                      B one-third                      C one-fifth                      D one-eighth
70. Thoracic bioimpedance derives information from electrodes placed on the —— chest and neck.  
A left lateral                      B right lateral                      C anterior                      D posterior

### CHAPTER THIRTYFIVE: MULTIPLE ORGAN DYSFUNCTION SYNDROME

71. The Acute Pathophysiology and Chronic Health Evaluation (APACHE II) score of 25 carries a —— % mortality.  
A 20                      B 30                      C 40                      D 50
72. Given no extraneous circumstances (e.g., ST elevation MI, continued bleeding), a —— is preferred threshold for transfusion.  
A hemoglobin trigger of  $\leq 4.0$  g/dL    B hemoglobin trigger of  $\leq 7.0$  g/dL    C hemoglobin trigger of  $\leq 3.0$  g/dL    D hemoglobin trigger of  $\leq 9.0$  g/dL

### CHAPTER THIRTSIX: CARDIOVASCULAR DISEASE AND MONITORING

73. —— is the most common etiology of shock after injury.  
A Heart problems                      B Hemorrhage                      C Vascular changes                      D Nerve damage
74. —— echocardiography (TTE) examines parasternal, apical, subcostal, and suprasternal windows.  
A Transtracheal                      B Transterminal                      C Transthoracic                      D Transtubule

### CHAPTER THIRTYSEVEN: ACUTE KIDNEY INJURY

75. AKI occurs in —— of critically ill trauma patients, with mortality ranging from 22% to 95.3%.  
A 6.3% to 8%                      B 6.3% to 12%                      C 6.3% to 19%                      D 6.3% to 27%
76. Active urine sediment (very rare) with RBC casts is diagnostic of vasculitis or glomerulonephritis.  
A True                      B False

### CHAPTER THIRTYEIGHT: ACUTE RESPIRATORY FAILURE AND MECH. VENTILATION

77. Hypoxemic respiratory failure (Type ——) is defined as arterial partial pressure of oxygen (PaO<sub>2</sub>) < 60 mm Hg on room air.  
A I                      B II                      C III                      D IV
78. CMV (—— mechanical ventilation mode) may result in diaphragmatic inactivity, promoting atrophy, and contractility dysfunction.  
A collateral                      B controlled                      C concurrent                      D clinical

### CHAPTER THIRTYNINE: ABDOMINAL COMPARTMENT SYNDROME, OPEN . .

79. Mortality of ACS ranges from —— after detection and treatment.  
A 21% to 38%                      B 2% to 15%                      C 42% to 68%                      D 25% to 32%
80. IAH is defined by a sustained increase in IAP of —— or more.  
A 2 mm Hg                      B 25 mm Hg                      C 30 mm Hg                      D 12 mm Hg

## CHAPTER FORTY: LIVER FAILURE

81. Fulminant hepatic failure (FHF) is synonymous with acute liver failure (ALF).  
A True B False
82. PH (portal hypertension) is defined as a portal pressure gradient between the portal vein and hepatic veins of greater than:  
A 12 mm Hg B 5 mm Hg C 2 mm Hg D 25 mm Hg

## CHAPTER FORTYONE: SUPPORT OF THE ORGAN DONOR

83. Once life support is withdrawn, the general time window for procurement is approximately ——— minutes for the liver.  
A 45 B 120 C 180 D 30
84. Progression from brain death to somatic death results in the loss of ——— of potential donors.  
A 35% to 40% B 20% to 30% C 10% to 20% D 2% to 5%

## CHAPTER FORTYTWO: ACCIDENTAL AND THERAPEUTIC HYPOTHERMIA, COLD . .

85. Severe hypothermia is classified primarily by the patient's core temperature – below:  
A 28°C B 18°C C 10°C D 23°C
86. Between ——— of severely injured trauma patients become hypothermic.  
A 10% and 20% B 21% and 50% C 51% and 62% D 63% and 70%

## CHAPTER FORTYTHREE: INTRODUCTION TO EMERGENCY GENERAL SURGERY . .

87. Dehydration is consistent with a BUN/Cr ratio of:  
A  $\geq 20:2$  B  $\geq 40:1$  C  $\geq 30:1$  D  $\geq 20:1$
88. Biliary scintigraphy is useful to assess the biliary tree and function of the:  
A small intestine B pancreas C gallbladder D spleen

## CHAPTER FORTYFOUR: PREPARATION, INITIAL RESUSCITATION, AND . .

89. Hypotension in the setting of trauma is often arbitrarily defined as a systolic blood pressure below ——— mm Hg.  
A 90 B 70 C 80 D 65
90. Prothrombin ——— concentrates (PCCs) contain varying amounts of Factor II, VII, IX, X, and proteins C and S.  
A complex B combined C calcified D circulatory

## CHAPTER FORTYFIVE: ACUTE ABDOMEN IN ICU PATIENTS

91. Intra-abdominal pathology necessitating surgical intervention occurs in approximately ——— admitted to the intensive care unit.  
A 9% of patients B 4% of patients C 14% of patients D 20% of patients
92. US is not sensitive to ascites and intra-abdominal fluid collections (e.g., abscess).  
A True B False

## CHAPTER FORTYSIX: BOWEL OBSTRUCTION

93. A ——— bowel obstruction occurs when the lumen is totally occluded and does not allow passage of air or fluid.  
A partial B complete C simple D complex
94. ——— occurs when a segment of intestine twists about its mesentery.  
A Closed loop obstruction B Partial bowel obstruction C Complicated loop obstruction D Volvulus

## CHAPTER FORTYSEVEN: GASTROINTESTINAL BLEEDING

95. More recent estimates place the incidence of upper GI bleeding at ——— per 100,000 population annually.  
A 5 B 12 C 54 D 89
96. Mallory-(——) tears occur at the gastroesophageal junction (most will stop spontaneously).  
A Winkler B Walter C Weiss D Weber

## CHAPTER FORTYEIGHT: ACUTE PANCREATITIS

97. Excessive alcohol consumption and gallstone disease account for ——— of cases of acute pancreatitis.  
A 70% to 80% B 20% to 30% C 40% to 50% D 55% to 65%

## CHAPTER FORTYNINE: BILIARY TRACT DISEASE

98. An impacted large stone in Hartmann's pouch may mechanically obstructs the bile duct (—— syndrome).  
A Matheson's                      B Mirizzi's                      C Mason's                      D Maurer's
99. Cholecystenteric fistula occurs in —— of patients with acute cholecystitis.  
A 38%                      B 14%                      C 1% to 2%                      D 7%

## CHAPTER FIFTY: APPENDICITIS

100. Approximately —— people a year in the United States develop appendicitis.  
A 12,000                      B 25,000                      C 120,000                      D 250,000
101. —— % of "grossly normal" appendices have microscopic pathology.  
A 5                      B 10                      C 15                      D 20

## CHAPTER FIFTYONE: ESOPHAGUS, STOMACH, AND DUODENUM

102. —— syndrome is post-emetic esophageal perforation.  
A Joseph's                      B Boerhaave's                      C Wilkerson's                      D Antwerp's
103. Duodenal and pyloric channel perforations are the most common sites of peptic ulcer perforation.  
A True                      B False

## CHAPTER FIFTYTWO: INFLAMMATORY DISEASES OF THE INTESTINES

104. Endoscopic —— cholangiopancreatography (ERCP) carries a risk of perforation between 0.5% and 2%.  
A residual                      B retrograde                      C return                      D reverse
105. Closure rate of an ECF is —— with conservative management.  
A 10% to 40%                      B 85%                      C 60%                      D 1% to 5%

## CHAPTER FIFTYTHREE: ACUTE ANORECTAL PAIN

106. Anal fissure is rarely the cause of acute anal pain.  
A True                      B False
107. Pilonidal disease typically presents:  
A in infants                      B in older women                      C in puberty or young adulthood                      D after 50 years of age

## CHAPTER FIFTYFOUR: SOFT TISSUE INFECTION

108. NSTIs (—— soft tissue infections) are known by many names including gas gangrene and Fournier's gangrene.  
A nominal                      B negative                      C nodular                      D necrotizing

## CHAPTER FIFTYFIVE: VASCULAR EMERGENCIES

109. An aneurysm is a permanent localized dilatation of a vessel that creates a —— % or greater increase in its expected normal diameter.  
A 15                      B 35                      C 20                      D 50
110. Patients with AEF (aortoenteric ——) may present with life-threatening hemorrhage.  
A fissure                      B fibroids                      C fistula                      D factor

## CHAPTER FIFTYSIX: HERNIAS

111. An estimated —— million hernia repairs occur each year worldwide. Of those, 5% to 15% are repaired emergently.  
A 20                      B 10                      C 5                      D 70
112. Incisional hernias develop in —— of patients who undergo midline laparotomy.  
A 1% to 4%                      B 13% to 20%                      C 22% to 30%                      D 31% to 40%

## CHAPTER FIFTYSEVEN: OBSTETRIC AND GYNECOLOGIC EMERGENCIES

113. Extrauterine pregnancies may occur in the cervix, abdomen, cornua of the uterus, ovary, or in a previous cesarean scar.  
A True                      B False
114. Spontaneous abortion is defined as loss of the pregnancy prior to —— weeks of gestation.  
A 15                      B 32                      C 8                      D 20





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| 24 |  | 48 |  | 72 |  | 96 |  | 120 |  |