

**T.C.**

**ISTANBUL MEDIPOL** **UNIVERSITY**

**INTERNATIONAL SCHOOL OF MEDICINE**



**GENERAL SURGERY CLERKSHIP GUIDE**

**2021 -** **2022**

**CLERKSHIP DESCRIPTION**

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| **Education Grade** | Year IV |
| **Clerkship Duration** | 5 Weeks |
| **Training Place** | Medipol Mega University Hospital |
| **Instructors** | * Prof. Dr. Mustafa ONCEL * Prof. Dr. Fazlı Cem GEZEN * Prof. Dr. Murat DAYANGAÇ * Assoc. Prof. Cigdem ARSLAN * Assoc. Prof. Nuri OKKABAZ * Assoc. Prof. Pelin BASIM * Assoc. Prof. Refik Bademci * Asist. Prof. Mirac Ilker Pala |
| **The Head Instructor** | * Assoc. Prof. Çigdem Arslan |

**THE AIM OF GENERAL SURGERY** **CLERKSHIP**

After completion of clerkship period, medical student recognizes and treats common diseases associated with the abdomen, breast, and thyroid in adult patients; suspects rarer diseases and refers them to relevant specialist. In case of life-threatening emergency situations, she/he makes the diagnosis, performs emergency treatment, and refers the patient to the specialist as necessary. She/he performs examination of the breast, cervical region, anorectal region, abdomen, and hernia regions. She/he applies wound and burn care.

**Learning Methods:**

* Theoretical Course (Online – Face to Face)
* Practical Training on mannequin
* Clinical training/Outpatient clinic/Operating Room Practice
* Critically appraisal of the literature
* Case Discussion

**THE LEARNING OBJECTIVES OF GENERAL SURGERY CLERKSHIP**

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|  | **Course Name** | **Learning Objectives** | **Duration (hour)** | **Level of Learning** |
| 1 | **Evidence-Based Surgery** | Reviews a medical article | 1 | **PreD** |
|  |  | Criticizes clinical applications in consideration of scientific evidence |
| 2 | **Constipation**:  GI Motility Disorders and Diverticular Diseases | Describes the epidemiology of diverticular disease | 1 | **PreD** |
| Explains the symptoms and findings of diverticular disease. |
| Sorts the diagnostic methods in diverticular disease. |
| Describes the epidemiology of functional bowel diseases. |
| Explains the symptoms and findings in functional bowel diseases. |
| Sorts the diagnostic methods in functional bowel diseases. |
| 3 | **Rectal Bleeding**: Colorectal tumors | Sorts symptoms and findings in rectal bleeding. | 1 | **PreT-P** |
| Explains the relationship between iron deficiency anemia and colon cancer. |
| Describes the diagnosis and the steps of differential diagnosis in rectal bleeding. |
| Sorts the risk factors for colorectal cancers. |
| Explains the principles of screening in colorectal cancer. |
| Describes clinical findings according to the location of the tumor and diagnostic approaches in colorectal cancer |
| 4 | **Dyspepsia**:  Peptic Diseases (Ulcer, Gastritis and Gastroesophageal reflux disease) | Describes the pathophysiological mechanism of GERD | 1 | **DT-P-FU** |
| Explains the symptoms and findings of GERD |
| Sorts the differential diagnosis and diagnostic methods in GERD |
| Explains GERD treatment |
| Describes the principles of protection and monitoring for GERD. |
| Explains the symptoms and findings of peptic diseases. |
| Explains the principles of protection and monitoring in peptic diseases. |
| Sorts treatment methods in complicated peptic diseases. |
| Outlines the etiology of PQlorus stenosis, its symptoms, clinical findings, and diagnostic methods. | **PreD** |
| 5 | **Obesity** | Explains the relationship between metabolic syndrome and obesity | 1 | **D-P-FU** |
| 6 | **Abdomen/Groin Mass**:  Abdominal Wall Defects and Inguinal Hernias | Recalls the anatomy of the anterior abdominal wall and the inguinal region. | 1 | **D-E** |
| Describes the terminology for hernias. |
| Explains the symptomatology of abdominal wall hernias. |
| Describes physical examination findings of abdominal wall hernias. |
| Describes differential diagnosis and diagnostic tools in abdominal wall hernias. |
| Describes emergencies and management of abdominal wall hernias. |
| 7 | **Breast Mass:** Breast Diseases and Tumors | Explains the general characteristics of nipple discharges. | 2 | **PreT-P** |
| Explains the incidence and risk factors of breast cancer in society. |
| Describes screening methods for breast cancer. |
| Describes the symptoms and findings of breast cancer. |
| **Explains the principles of breast examination.** |
| Sorts diagnostic methods in breast cancer. |
| Classifies breast cancers. |
| Lists the symptoms and findings in lymphedema associated with breast cancer | **PreT-P-FU** |
| Identifies risk factors and of prevention of lymphedema associated with breast cancer. |
| Explains principles of follow-up of the patient with lymphedema associated with breast cancer. |
| 8 | **Neck Mass**:  Thyroid and Parathyroid Diseases | **Explains the principles of a neck examination.** | 2 | **D-P-FU** |
| Explains the pathophysiological mechanism of goiter. |
| Sorts the symptoms and findings of goiter. |
| Describes the diagnosis and differential diagnosis in goiter. |
| Explains the risk factors for goiter and its relationship to iodine deficiency. |
| Sorts the symptoms and findings of parathyroid diseases. | **PreD** |
| Explains the diagnostic approach in parathyroid diseases. |
| Identifies the risk factors for cancer in thyroid nodules. |
| Describes the incidence and prognostic factors of thyroid tumors. |
| Explains the symptoms and clinical manifestations of thyroid tumors. |
| Classifies thyroid tumors. |
| Sorts diagnostic methods in thyroid tumors. |
| Sorts the symptoms and clinical manifestations of hypothyroidism. | **DT-FU** |
| Explains the etiology and diagnostic methods of hypothyroidism. |
| Explains the treatment of hypothyroidism and the principles of follow-up. |
| 9 | **Biliary Colic**:  Cholecystitis, Cholelithiasis | Understands the anatomy of liver and the biliary system | 2 | **PreD** |
| Discuss the role of diagnostic interventions and imaging in the evaluation of hepatobiliary diseases |
| Describe how to differentiate medical and surgical causes of jaundice |
| Describe the symptoms related to hepatobiliary diseases |
| Discuss the presentation, diagnostic strategy and treatment of patients presenting with biliary colic |
| Discuss the presentation, diagnostic strategy and treatment of patients presenting with cholangitis |
| 10 | **Hepatomegaly**:  Liver Masses and Portal Hypertension | Lists the most common benign hepatic tumors and describes their management | 2 | **PreT-P** |
| Discuss the most common malignant hepatic tumors and their management |
| Explains the etiology, diagnosis methods and the principles of protection for Cyst Hydatic |
| Lists the symptomatology of space occupying liver lesions |
| Explains the role of chronic liver disease causing cirrhosis and increasing the risk for hepatobiliary cancer |
| Discuss the fundamentals of imaging and other diagnostic interventions of the evaluation the space occupying liver lesions |
| Discuss the signs and symptoms related to portal hypertension. | **PreD** |
| Explains the pathophysiological mechanism and differential diagnosis of ascites. |  | **D** |
| 11 | **Abdominal Pain 1**:  Acute abdomen Syndrome and Peritonitis | Explains the pathophysiology of abdominal pain. | 2 |  |
| Sorts the symptoms and findings of abdominal pain. | **E** |
| Explains the principles of abdominal examination. |
| Sorts the differential diagnosis in the patient with abdominal pain. |
| Sorts differential diagnosis and diagnostic tools in acute abdomen. |
| Describes the risk management in acute abdomen. |
| Sorts the steps of non-operative/preoperative emergency treatment in acute abdomen. |
| Explains the pathophysiological mechanism and the causes of peritonitis. |
| 12 | **Acute Appendicitis** | Describes the pathophysiological mechanism of acute appendicitis. | 1 | **E** |
| Explains the symptoms and examination findings in acute appendicitis |
| Describes the first-line treatment of acute appendicitis. |
| 13 | **Abdominal Pain 2**: Pancreatitis | Classifies acute pancreatitis. | 1 | **E** |
| Describes the diagnostic tools in acute biliary pancreatitis. |
| Describes emergency treatment in acute biliary pancreatitis. |
| Describes symptoms and findings of chronic pancreatitis. | **PreT-P** |
| Describes differential diagnosis in chronic pancreatitis. |
| Understands the etiology and protective measures of chronic pancreatitis. |
| 14 | **Mass in The Abdomen 2/Jaundice** | Describes how to differentiate medical and surgical causes of  jaundice | 2 | **PreT-P** |
| Discuss the role of radiological-radio nucleotide imaging, and diagnostic interventions in the evaluation of obstructive jaundice |
| Lists the periampullary diseases causing obstructive jaundice |
| Explains the role of endoscoPQ and interventional radiology in the management of  obstructive jaundice |
| Describes the indications for surgical intervention and the surgical options available to treat surgical jaundice |
| Knows where to refer the patients who have periampullary tumors |
| 15 | **Shock:** Sepsis and Coma | Describes the signs and findings in shock | 1 | **E** |
| Indicates the pathophysiology and mechanisms of shock |
| Determines the type of shock and makes differential diagnosis |
| Utilizes clinical and laboratory indicators to guide the management of emergency treatment |
| Performs emergency treatment of patient in shock |
| 16 | **Abdominal Mass 1/Dysphagia 1**: Tumors of the gastrointestinal tract | Classifies benign tumors of the esophagus and stomach. | 1 | **PreT-P** |
| Explains the epidemiology of malignant tumors of the esophagus and stomach. |
| Sorts etiological factors and preventive principles in malignant tumors of the esophagus and stomach. |
| Classifies malignant tumors of the esophagus and stomach. |
| Describes clinical findings of esophageal and stomach cancer. |
| Describes diagnostic and staging tools for esophageal and stomach cancer. |
| Explains the importance of early diagnosis and screening methods in esophageal and gastric cancer. |
| 17 | **Abdominal Distention**:  Ileus, Invagination and Abdominal Compartment Syndrome | Describes symptoms and findings of intestinal obstruction. | 1 | **E** |
| Defines the etiology of intestinal obstruction. |
| Describes the diagnostic methods and differential diagnosis in intestinal obstruction. |
| Describes emergency treatment approaches in intestinal obstruction. |
| Describes pathogenesis, symptoms, clinical manifestations, and emergency treatment approach in abdominal compartment syndrome. |
| Describes pathogenesis, symptoms, clinical manifestations, and emergency treatment approach in invagination |
| 18 | **Burn** | Describes pathophysiology of burns. | 1 |  |
| Classifies burns. | **DT-E** |
| Describes the steps of inflammatory response in burn |
| Describes fluid resuscitation in burn. |
| Explains compartment syndrome and emergency approach to burn. |
| 19 | **Lower GI Bleeding** | Explains the symptoms and clinical manifestations in inflammatory bowel diseases. | 1 | **PreD** |
| Describes diagnosis and differential diagnosis in inflammatory bowel diseases. |
| Explains the management and resuscitation principles in lower GI hemorrhages. | **D-E** |
| Describes the principles of diagnosis and differential diagnosis in lower GI bleeding. |
| Describes the approaches of emergency intervention for lower GI bleeding |
| 20 | **Wound Healing and Care** | Describes the diagnosis and treatment of skin and soft tissue infections and abscesses. | 1 | **DT-P** |
| Describes the steps of opening an abscess. |
| Sorts wound classification. |
| Describes and classifies surgical site infections. |
| Describes the emergency management of emphysematous gangrene in the emergency room. | **E** |
| Describes the diagnosis and treatment of pressure wounds, prevention measures and long-term follow up. | **DT-P-FU** |
| 21 | **WeiMSt Loss**: Malnutrition | Defines nutrition and lists the types of nutrition | 1 | **DT-P-FU** |
| Determines the patient with nutritional risk |
| Describes screening of malnutrition and assessment tools |
| Sort the indications and complications of enteral nutrition |
| Sort the indications and complications of total parenteral nutrition |
| Performs management of nutrition and calory intake in surgical patient |
| 22 | **Dehydration:** Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Describes the diagnosis and treatment of dehydration. | 2 | **DT-E-P** |
| Describes the approach to the patient with dehydration in emergency room. |
| Describes how to prevent dehydration |
| Identifies common electrolyte disorders in surgical patients, describes first-line treatment in emergency situations | **D-E-P** |
| Explains the approach to acid-base balance disorders in emergency cases. | **E** |
| Perform blood gas analysis |
| 23 | **Dysphagia 2**: Esophagus and Diaphragm Diseases | Recalls the surgical anatomy of the esophagus, diaphragm, and hiatal area. | 1 | **PreD** |
| Sorts the symptoms of diseases of the esophagus, diaphragm, and hiatal area. |
| Identifies esophagus motility disorders and diverticulitis. |
| Sorts differential diagnosis in diseases of the esophagus, diaphragm, and hiatal area, |
| 24 | **Upper GI Bleeding** | Describes the management in upper GI bleeding. | 1 | **D-E** |
| Explains the relationship between upper GI bleeding and iron deficiency anemia. |
| Describes resuscitation and monitoring methods in the bleeding patient. |
| Explains the etiology of bleeding and the methods used in diagnosis. |
| Describes the differential diagnosis in upper GI bleeding. |
| Explains the principles of emergency management of upper GI bleeding. |
| 25 | **Abdominal Traumas:** Crush Injury and Tetanus | Describes the diagnostic methods in blunt and penetrating abdominal trauma. | 1 | **E** |
| Explains the principles of emergency approach in blunt and penetrating abdominal trauma. |
| Explains the approach of non-operative treatment in blunt and penetrating abdominal trauma. |
| Sorts out the indications of an emergency laparotomy. |
| Describes tetanus prophylaxis in a traumatized patient. |
| Identifies crush injury and sorts out its complications. |
| 26 | **Anorectal Pain**:  Benign Anorectal Diseases | Describes the principles of perianal examination | 1 | **D** |
| Sorts the symptoms and findings of perianal abscess |
| Explains diagnostic methods and differential diagnosis of perianal abscesses |
| Describes the pathophysiological mechanism of anal fissure. | **DT** |
| Sorts symptoms and findings of anal fissure. |
| Describes the treatment of anal fissure. |
| Describes the pathophysiological mechanism of hemorrhoidal disease. | **DT-P** |
| Classifies hemorrhoids, describes the treatment of hemorrhoids |
| Describes the risk factors and prevention of hemorrhoids |
| 27 | **Venous Thrombo-embolism** | Sorts the risk factors for pulmonary embolism and deep vein thrombosis. | 1 | **A-P-FU** |
| Describes pulmonary embolism and deep vein thrombosis prophylaxis. |
| Describes the emergency management in pulmonary embolism |
| Explains the principles of follow-up in pulmonary embolism. |
| Explains the clinical findings and physical examination in deep vein thrombosis. | **PreD-P** |

**THE LEARNING OBJECTIVES** **WITH QUALIFICATIONS** **AND** **KEY** **ROLES**

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| **LEARNING OBJECTIVES** | **RELATED PROGRAM QUALIFICATIONS** | **BASIC ROLE** | **TEPDAD GENERAL MEDICAL SKILLS** |
| **R1- Medical Doctor R2-Team Employee**  **R3-Communicator**  **R4-Leader**  **R5-Health Advocate**  **R6-Scientist**  **R7-Professional** | **MS1- Analytical and Critical Thinking**  **MS2-Clinical Inquiry-Reasoning**  **MS3-Problem Solving**  **MS4-Accessing and Using Information MS5-Lifelong**   **Learning**  **MS6-Communication and**  **Team Work** |
| Recalls physiology of wound healing; anatomy, physiology and histology of liver, bile ducts, colorectal system, stomach and duodenum, appendix, thyroid, parathyroid and adrenal gland; Remembers anatomy of diaphragm, hiatus, small intestines, colon, anorectal region, abdominal wall, and breast. | PQ1 | R1 | MS4, MS5 |
| Creates a differential diagnosis list for Neck Mass, mass in the abdomen, acute abdomen, ileus, jaundice and anemia regarding anamnesis, physical examinations, and diagnostic tools. | PQ2, PQ6, PQ14 | RI, R3, R7, | MS1, MS2, MS3, MS6 |
| Explains the common clinical, laboratory and pathological findings of breast, thyroid, parathyroid, adrenal, anorectal, gastrointestinal and hepatopancreatobiliary system related diseases and abdominal wall  defects. | PQ1, PQ2, PQ14 | RI, R7 | MS1, MS2, MS3, |
| Explains the general epidemiological characteristics and preventive medicine practices related to breast cancer, colorectal cancer, and hepatocellular cancer. | PQ3, PQ10, PQ14 | RI, R5 | MS4, MS5 |
| Suspects the pre-diagnose of colorectal cancers, liver cancers and periampullary cancers, gastrointestinal tract cancers and motility disorders, perianal abscess, thyroid cancer, acacia, acute and chronic pancreatitis, acute appendicitis, acute cholecystitis, hyperthyroidism, hypoparathyroidism, pheochromocytoma, diverticular disease, gynecomastia, lymphedema, and anemia. Refers the patient to relevant specialist in the liMSt of physical examination findings. | PQ1, PQ2, PQ4, PQ5,PQ6, PQ7, PQ14 | R1, R2.R7 | MS1, MS2, MS3, MS6 |

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| **LEARNING OBJECTIVES** | **RELATED PROGRAM QUALIFICATIONS** | **BASIC ROLE** | **TEPDAD GENERAL MEDICAL SKILLS** |
| **R1- Medical Doctor R2-Team Employee**  **R3-Communicator**  **R4-Leader**  **R5-Health Advocate**  **R6-Scientist**  **R7-Professional** | **MS1- Analytical and Critical Thinking**  **MS2-Clinical Inquiry-Reasoning**  **MS3-Problem Solving**  **MS4-Accessing and Using Information MS5-Lifelong**   **Learning**  **MS6-Communication and**  **Team Work** |
| Explains the criteria for further examination and performs relevant referral for Acute abdomen, ileus, bleeding of the lower and upper gastrointestinal tract, fluid and electrolyte balance disorders, shock, colorectal cancers, gastrointestinal tract cancers and motility disorders, perianal abscess, anal prolapse, thyroid cancer, acacia, acute and chronic pancreatitis, acute appendicitis, acute cholecystitis, hyperthyroidism, hypoparathyroidism, pheochromocytoma, diverticular disease, anal fistula, gynecomastia, nipple discharge, lymphedema, abdominal wall and inguinal hernias. | PQ1, PQ2, PQ5, PQ6,PQ7, PQ14 | R1, R3 | MS6 |
| Explains the risk factors; performs counseling and follow-up of anal fissure, hemorrhoids, anal abscess, anal prolapse, peptic ulcer, iron deficiency  diagnoses anemia, surgical field infections, breast infections, hypothyroidism, hyperthyroidism, hypoparathyroidism, | PQI, PQ2, PQ3, PQ5, PQ6, PQ7, PQ8, PQ14 | R1, R3, R7 | MS1, MS2, MS3, MS6 |
| Performs the primary care level follow-up of regulated hyperthyroidism, hypothyroidism, and hypoparathyroidism | PQ2, PQ4, PQ14 | R1, R2 | MS4, MS6 |
| Explains the risk factors and measures to reduce the prevalence of obesity, goiter, gastroesophageal reflux, and peptic ulcer diseases and provides counseling for them. | PQ3, PQ4, PQ8, PQ14 | R1, R5 | MS4, MS6 |
| Embraces the importance of fiMSting against obesity and be a role model to the society in preventing obesity. | PQ3, PQ8, PQ12, PQ14 | R4, R5 | MS4, MS6 |
| Diagnosis hypothyroidism, hyperthyroidism, hypoparathyroidism, gastroesophageal reflux disease, peptic ulcer, iron deficiency anemia, hemorrhoids, anal fissure, goiter, and dehydration by selecting the appropriate diagnostic tests and plans the treatment within the scope of rational drug use principles. | PQ1, PQ2, PQ6, PQ7, PQ11, PQ14, PQ18 | R1, R5, R7 | MS1, MS2, MS3, MS6 |

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| **LEARNING OBJECTIVES** | **RELATED PROGRAM QUALIFICATIONS** | **BASIC ROLE** | **TEPDAD GENERAL MEDICAL SKILLS** |
| **R1- Medical Doctor R2-Team Employee**  **R3-Communicator**  **R4-Leader**  **R5-Health Advocate**  **R6-Scientist**  **R7-Professional** | **MS1- Analytical and Critical Thinking**  **MS2-Clinical Inquiry-Reasoning**  **MS3-Problem Solving**  **MS4-Accessing and Using Information MS5-Lifelong**   **Learning**  **MS6-Communication and**  **Team Work** |
| Diagnoses life-threatening acute abdomen, ileus, lower and upper gastrointestinal bleeding, fluid and electrolyte disorders, shock and abdominal traumas and refers to the specialist in accordance with its emergency treatment. Explains the clinical properties of abdominal wall and groin hernias and plans emergency treatment. | PQ1, PQ2, PQ6, PQ7, PQ11, PQ14 | R1 | MS1, MS2, MS3, MS6 |
| Diagnoses and treats dehydration, iron deficiency anemia, hemorrhoids, anal fissure, goiter, gastroesophageal reflux, and peptic ulcers. | PQ1, PQ2, PQ3, PQ6,  PQ7, PQ11, PQ14 | R1, R5 | MS1, MS2, MS3, MS6 |
| Performs physical examination of breast, thyroid (cervical region), anorectal region and abdomen and hernia regions | PQ1, PQ2, PQ6, PQ7 | R1, R3, R7 | MS2, MS6 |
| At the end of this clerkship, students perform the following basic medical practices; Performs digital rectal examinations, head-neck examinations, abdominal examinations, puts and removes superficial sutures, knows wound and burn care, teaches self-breast examination. Evaluates general condition and vital findings, interprets the results of screening and diagnostic examination, trauma severity scoring. | PQ1, PQ6, PQ11, | R1, R3, R7 | MS2, MS6 |
| Uses diagnostic methods in a stepwise model from simple to complex. | PQ1, PQ2, PQ7, PQ18 | RI, R5, R7 | MS1, MS2, MS3 |
| Follows the current literature and critically appraisal of scientific articles. | PQ4, PQ13, PQ16 | R1, R3, R7 | MS4, MS5 |
| Understands the importance of multidisciplinary approach in diagnosis, treatment, and follow-up care after treatment of diseases in oncological surgery and transplantation. | PQ14, PQ20 | R2, R4, R7 | MS6 |
| When carrying out family medicine service, recognizes and reports hepatitis and echinococcosis at the primary level. | PQ8, PQ14, PQ18, | R1, R2, R7 | MS6 |

**THE TABLE OF CORE TRAINING PROGRAM FOR GENERAL SURGERY** **CLERKSHIP**

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| --- | --- | --- | --- | --- |
| **Symptoms/Conditions** | **Core diseases/Clinical Problems** | **Learning Levels** | **Year IV Course Name** | **Measurement-Evaluation** |
| **Dry mouth** | Dehydration | DT−E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
| **Anemia** | Iron deficiency anemia | DT-E-P-FU | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract  3. WeiMSt loss: Malnutrition | Oral-Written |
|  | Malnutrition | DT-P | WeiMSt loss: Malnutrition | Oral-Written |
|  | Lower gastrointestinal bleeding | D-E | 1. Rectal Bleeding: Colorectal tumors  2. Lower GI Hemorrhages  3. Anorectal Pain: Benign Anorectal Diseases | Oral-Written |
|  | Upper gastrointestinal bleeding | D-E | 1. Upper GI Hemorrhages  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract | Oral-Written |
| **Anorectal pain** | Anal fissure | DT | Anorectal Pain: Benign Anorectal Diseases | Oral-Written |
|  | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors | Oral-Written |
|  | Hemorrhoids | DT-P | Anorectal Pain: Benign Anorectal Diseases | Oral-Written |
|  | Perianal apse | D | Anorectal Pain: Benign Anorectal Diseases | Oral-Written |
| **Anuria- oliguria** | Crush injury | D-E-P | Abdominal Traumas: Crush Injury and Tetanus | Oral-Written |
|  | Dehydration | DT−E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Fluid and electrolyte disorders | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Shock | E | Shock: Sepsis and Coma | Oral-Written |
|  | Burns | DT-E | Burn | Oral-Written |
| **Fever** | Dehydration | DT-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Emphysematous gangrene | E | Wound Healing and Care | Oral-Written |
|  | Sepsis | E | Shock: Sepsis and Coma | Oral-Written |
| **Headache** | Dehydration | DT−E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
| **Back and lower back pain** | Trauma and injuries | E | Abdominal Traumas: Crush Injury and Tetanus | Oral-Written |
| **Alteration of consciousness** | Acid-base balance disorders | E | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
| **Alteration of consciousness** | Cardio-pulmonary arrest | E | Shock: Sepsis and Coma | Oral-Written |
|  | Coma | E | Shock: Sepsis and Coma | Oral-Written |
|  | Fluid and electrolyte disorders | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Shock | E | Shock: Sepsis and Coma | Oral-Written |
| **Cognitive impairments/amnesia** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Sore** throat | Gastro-esophageal reflux | DT-P-FU | Mass in the Neck: Thyroid and Parathyroid Diseases | Oral-Written |
| **Neck pain** | Thyroiditis | PreD | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Neck Mass** | Goiter | D-P-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Thyroid tumors | PreD | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Nausea, vomiting** | Acute Abdominal Syndrome | D-E | Abdominal Pain 1: Acute abdomen Syndrome and Peritonitis | Oral-Written |
|  | Acute pancreatitis | E | 1. Abdominal Pain 1: Acute abdomen Syndrome and Peritonitis  2. Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Appendicitis | E | 1. Abdominal Pain 1: Acute abdomen Syndrome and Peritonitis  2. Acute Appendicitis | Oral-Written |
|  | Gastro-esophageal reflux | DT-P-FU | 1. Dysphagia: Esophagus and Diaphragm and Diseases  2. Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease (GERD) | Oral-Written |
|  | Ileus | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Invagination | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Cholecystitis, cholelithiasis | PreD | 1. Abdominal Pain 1: Acute abdomen Syndrome and Peritonitis  2. Biliary Colic: Cholecystitis, Cholelithiasis | Oral-Written |
|  | PQlorus stenosis | PreD | Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease (GÖRH) | Oral-Written |
|  | Upper gastrointestinal bleeding | D-E | 1. Upper GI Hemorrhages  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract | Oral-Written |
| **Growth-development retardation** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Malabsorption | PreD | Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Malnutrition | DT-P-FU | WeiMSt loss: Malnutrition | Oral-Written |
| **Sexual function disorders** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| Palpitation |  |  | See anemia | Oral-Written |
| Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| Thyroiditis | PreD | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Skin rashes / Lesions (Maculopapular,** **bullous, etc.)** | Emphysematous gangrene | E | Wound Healing and Care | Oral-Written |
| **Skin and appendix changes (Dryness, discoloration, etc.)** | Malnutrition | DT-P-FU | WeiMSt loss: Malnutrition | Oral-Written |
|  | Varicose vein/venous insufficiency in the extremity | PreT-P | Venous Thrombo-embolism | Oral-Written |
|  | Chronic hepatitis | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
| **Dyspepsia** | Cholecystitis, cholelithiasis | PreD | Biliary Colic: Cholecystitis, Cholelithiasis | Oral-Written |
|  | Malabsorption | PreD | 1. WeiMSt loss: Malnutrition  2. Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Peptic diseases (ulcer, gastritis) | DT-P | 1. Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract | Oral-Written |
| **Dyspnea** | Diaphragmatic hernias | PreD | Dysphagia: Esophagus and Diaphragms and Diseases | Oral-Written |
|  | Pulmonary embolism | E-P-FU | Venous Thrombo-embolism | Oral-Written |
| **Diarrhea** | Tumors of the gastrointestinal tract | PreT-P | 1. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract  2. Rectal Bleeding: Colorectal tumors | Oral-Written |
|  | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Disorders of the gastrointestinal tract | PreD | 1. Dysphagia: Esophagus and Diaphragm and Diseases  2. Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
|  | Chronic pancreatitis | PreT-P | Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Malabsorption | PreD | Abdominal Pain 2: Pancreatitis | Oral-Written |
| **Mood change** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Chest pain** | Gastro-esophageal | DT-P-FU | Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease | Oral-Written |
|  | Peptic diseases (ulcer, gastritis) | DT-P | Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease | Oral-Written |
|  | Pulmonary embolism | E-P-FU | Venous Thrombo-embolism | Oral-Written |
| Fatigue | Lower gastrointestinal bleeding | D-E | Lower GI Hemorrhages | Oral-Written |
|  | Dehydration | DT-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Anemia-titled diseases | | | Oral-Written |
|  | Cancer/tumor head diseases | | | Oral-Written |
|  | Fluid and electrolyte disorders | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Hematochesia/ anorectal bleeding** | Lower gastrointestinal bleeding | D-E | Lower GI Hemorrhages | Oral-Written |
|  | Anal fissure | DT | Anorectal Pain: Benign Anorectal Diseases | Oral-Written |
|  | Diverticular diseases | PreD | Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
|  | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract | Oral-Written |
|  | Hemorrhoids | DT-P | Anorectal Pain: Benign Anorectal Diseases | Oral-Written |
|  | Invagination | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
| **Hemoptysis** | Pulmonary embolism | E-P-FU | Venous Thrombo-embolism | Oral-Written |
| **Hepatomegaly** | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract  3. Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Hepatosteatosis | PreD | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Heart failure | D-E-P-FU | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Cyst Hydatid disease | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Chronic hepatitis | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Lymphoproliferative diseases | PreD | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Obesity | D-P'FU | Obesity | Oral-Written |
| **Hyperactivity** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Hypertension** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Metabolic syndrome | D-P-FU | Obesity | Oral-Written |
|  | Obesity | D-P'FU | Obesity | Oral-Written |
|  | Secondary hypertension | PreD | Obesity | Oral-Written |
| **Hypotension** | Dehydration | DT-E-P | 1. Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders  Shock 2: Sepsis and Coma | Oral-Written |
|  | Shock | E | Shock: Sepsis and Coma | Oral-Written |
| **Hypothermia/ hyperthermia** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Sepsis | E | Shock: Sepsis and Coma | Oral-Written |
|  | Burns | DT-E | Burn | Oral-Written |
| **Snoring** | Obesity | D-P'FU | Obesity | Oral-Written |
| **Infertility (male, female)** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Immobilization** | Obesity | D-P'FU | Obesity | Oral-Written |
|  | Trauma and injuries | E | Shock 1: Sepsis and Coma  2. Abdominal Traumas: Crush Injury and Tetanus | Oral-Written |
| **Appetite Disorders** | Cancer, tumor-headed diseases | | | Oral-Written |
|  | Cirrhosis of the liver | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Malnutrition | DT-P-FU | WeiMSt loss: Malnutrition | Oral-Written |
| **Gynecomastia** | Breast diseases and tumors | PreT-P | Breast Mass: Breast Diseases and Tumors | Oral-Written |
| **Constipation** | Diverticular diseases | PreD | Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
|  | Disorders of the gastrointestinal tract | PreD | Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
|  | Tumors of the gastrointestinal tract | PreT-P | Rectal Bleeding: Colorectal tumors | Oral-Written |
|  | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Bleeding tendency** | Cirrhosis of the liver | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Acute abdomen Syndrome | D-E | Abdominal Pain 1: Acute abdomen Syndrome and Peritonitis | Oral-Written |
|  | Acute pancreatitis | E | Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Appendicitis | E | Acute Appendicitis | Oral-Written |
|  | Diverticular diseases | PreD | Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
| **Abdominal pain** | Motility disorders of the gastrointestinal tract | PreD | 1. Dysphagia: Esophagus and Diaphragm and Diseases  2. Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
|  | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract  3. Hepatomegaly: Liver Masses and Portal Hypertension  4. Mass in the abdomen 2/Jaundice | Oral-Written |
|  | Abdominal traumas | E | 1. Abdominal Traumas: Crush Injury and Tetanus  Shock 2: Sepsis and Coma | Oral-Written |
|  | Cholecystitis, cholelithiasis | PreD | Biliary Colic: Cholecystitis, Cholelithiasis | Oral-Written |
|  | Ileus | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Invagination | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Chronic pancreatitis | PreT-P | Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Malabsorption | PreD | Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Peptic diseases (ulcer, gastritis) | DT-P | Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease | Oral-Written |
|  | Peritonitis | E | Abdominal Pain 1: Acute abdomen Syndrome and Peritonitis | Oral-Written |
| **Abdominal mass** | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract  3. Hepatomegaly: Liver Masses and Portal Hypertension  4. Mass in the abdomen 2/Jaundice | Oral-Written |
|  | Invagination | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Pubic abdominal wall hernias | D-E | Abdominal/Groin Mass: Abdominal Wall Tears and Inguinal Hernias | Oral-Written |
| **Bloating in the Abdomen** | Acute abdomen syndrome | D-E | Abdominal Pain 1: Acute abdomen Syndrome and Peritonitis | Oral-Written |
|  | Disorders of the gastrointestinal tract | PreD | 1. Dysphagia: Esophagus and Diaphragm and Diseases  2. Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
|  | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract  3. Hepatomegaly: Liver Masses and Portal Hypertension  4. Mass in the abdomen 2/Jaundice | Oral-Written |
|  | Ileus | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Invagination | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
| **Muscle weakness** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Muscle-Skeletal system pains (extremity** **and soft** **tissue)** | Crush injury | D-E-P | Abdominal Traumas: Crush Injury and Tetanus | Oral-Written |
|  | Compartment syndrome | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Thrombophlebitis | D-P | Venous Thrombo-embolism | Oral-Written |
| **Groin mass** / **Scrotum** | Pubic abdominal wall hernias | D-E | Abdominal/Groin Mass: Abdominal Wall Tears and Inguinal Hernias | Oral-Written |
| **Itching** | Cirrhosis of the liver | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Skin and soft tissue infections, abscess | DT-P | Wound Healing and Care | Oral-Written |
| **WeiMSt gain/excess weiMSt** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Metabolic syndrome | D-P-FU | Obesity | Oral-Written |
|  | Obesity | D-P'FU | Obesity | Oral-Written |
| **WeiMSt loss** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Cancer/tumor head diseases | | | Oral-Written |
|  | Malabsorption | PreD | 1. WeiMSt loss: Malnutrition  2. Abdominal Pain 2: Pancreatitis | Oral-Written |
|  | Malnutrition | DT-P-FU | WeiMSt loss: Malnutrition | Oral-Written |
| **Colic pains (Renal, Biliary,** **intestinal)** | Disorders of the gastrointestinal tract | PreD | 1. Dysphagia: Esophagus and Diaphragm and Diseases  2. Constipation: GI Motility Disorders and Diverticular Diseases | Oral-Written |
|  | Ileus | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Invagination | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Cholecystitis, cholelithiasis | PreD | Biliary Colic: Cholecystitis, Cholelithiasis | Oral-Written |
| **Caustic Ingestion** | Burns | DT-E | Burn | Oral-Written |
| **Cramp** | Acid-base balance disorders | E | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Fluid and electrolyte disorders | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
| **Lymphadenopathy** | Cancer-tumor-titled diseases | | | Oral-Written |
| **Melena/ Hematemesis** | Lower gastrointestinal bleeding | D-E | 1. Anorectal Pain: Benign Anorectal Diseases  2. Rectal bleeding: Colorectal tumors | Oral-Written |
|  | Diverticular diseases | PreD | Constipation: GI Motility Disorders and Diverticular Diseases  Dysphagia: Esophagus and Diaphragms and Diseases | Oral-Written |
|  | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract  3. Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Invagination | E | Abdominal Distention: Ileus, Invagination and Abdominal Compartment Syndrome | Oral-Written |
|  | Peptic disease (ulcer, gastritis) | DT-P | Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease | Oral-Written |
|  | Upper gastrointestinal bleeding | D-E | Upper GI Bleeding | Oral-Written |
| **Breast pain** | Breast diseases and tumors | PreT-P | Breast Mass: Breast Diseases and Tumors | Oral-Written |
| **Breast discharge** | Pituitary disorders | PreD | Breast Mass: Breast Diseases and Tumors | Oral-Written |
|  | Drug side effects | D-E-P-FU | Breast Mass: Breast Diseases and Tumors | Oral-Written |
|  | Breast diseases and tumors | PreT-P | Breast Mass: Breast Diseases and Tumors | Oral-Written |
| **Breast lumps** | Breast diseases and tumors | PreT-P | Breast Mass: Breast Diseases and Tumors | Oral-Written |
| **Seizure** | Acid-base balance disorders | E | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Hypoparathyroidism | PreD | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Fluid and electrolyte disorders | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
| **Edema** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Deep vein thrombosis | PreT-P | Venous Thrombo-embolism | Oral-Written |
|  | Varicose vein/venous insufficiency in the extremity | PreT-P | Venous Thrombo-embolism | Oral-Written |
|  | Cirrhosis of the liver | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
| **CouMS/Phlegm** | Gastro-esophageal | DT-P | Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease | Oral-Written |
| **Paresthesia** | Liquid electrolyte deformity | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Trauma-titled diseases | | | Oral-Written |
| **Paresis/ paralysis** | Trauma/injury diseases | | | Oral-Written |
| **Pelvic mass** | Tumors of the gastrointestinal tract | PreT-P | 1. Rectal Bleeding: Colorectal tumors  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract | Oral-Written |
| **Honeycomb, purpura,** **sow** | Trauma/injury diseases |  | Abdominal Traumas: Crush Injury and Tetanus | Oral-Written |
| **Hair loss** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Jaundice** | Tumors of the gastrointestinal tract | PreT-P | 1. Hepatomegaly: Liver Masses and Portal Hypertension  2. Mass in the abdomen 2/Jaundice | Oral-Written |
|  | Cirrhosis of the liver | PreT-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Cholecystitis, cholelithiasis | PreD | Biliary Colic: Cholecystitis, Cholelithiasis | Oral-Written |
|  | Chronic hepatitis | PreD | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Portal hypertension | PreD | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
| **Syncope** | Pulmonary embolism | E-P-FU | Venous Thrombo-embolism | Oral-Written |
| **Hoarseness** | Gastro-esophageal | DT-P | 1. Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease  2. Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract | Oral-Written |
| **Cyanosis** | Diaphragmatic hernias | PreD | Dysphagia: Esophagus and Diaphragms and Diseases | Oral-Written |
| **Scrotal pain** | Pubic and abdominal wall hernias | D-E | Abdominal/Groin Mass: Abdominal Wall Tears and Inguinal Hernias | Oral-Written |
| **Insect bites** | Tetanus | D-E-P | Abdominal Traumas: Crush Injury and Tetanus | Oral-Written |
| **Splenomegaly** | Cirrhosis of the liver | PreD-P | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
|  | Portal hypertension | PreD | Hepatomegaly: Liver Masses and Portal Hypertension | Oral-Written |
| **Sweating changes** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Tetany** | Vitamin D deficiency | DT-P-FU | Malnutrition | Oral-Written |
|  | Hypoparathyroidism | PreD | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Fluid and electrolyte disorders | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Tetanus | D-E-P | Abdominal Traumas: Crush Injury and Tetanus | Oral-Written |
| **Tremor** | Hyperthyroidism | D-E-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
| **Sleep disorders** | Hypothyroidism | DT-FU | Neck Mass: Thyroid and Parathyroid Diseases | Oral-Written |
|  | Sleep Apnea syndrome | PreD | Obesity | Oral-Written |
| **Burns** | Liquid electrolyte equilibrium disorders | D-E-P | Dehydration: Fluid and Electrolyte Balance Disorders, Acid-Base Balance Disorders | Oral-Written |
|  | Burns | DT-E | Burn | Oral-Written |
| **Flank pain** | Appendicitis | E | Acute Appendicitis | Oral-Written |
|  | Chronic pancreatitis | PreD-P | Abdominal Pain 2: Pancreatitis | Oral-Written |
| **Dysphagia** | Diverticular diseases (esophagus) | PreD | Dysphagia: Esophagus and Diaphragms and Diseases | Oral-Written |
|  | Gastro-esophageal | DT-P | Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease | Oral-Written |
|  | Peptic disease (ulcer, gastritis) | DT-P | Dyspepsia: Peptic Diseases (Ulcer, Gastritis) and Gastroesophageal reflux disease | Oral-Written |
|  | Tumors of the gastrointestinal tract | PrD-P | Mass in the abdomen 1/Dysphagia: Tumors of the gastrointestinal tract | Oral-Written |

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| **LEARNING**  **LEVEL** | **EXPLANATION** |
| **E** | Be able to recognize the emergencies and perform first-line emergency treatment and refer to specialist when necessary. |
| **PreD** | Be able to make the pre-diagnosis and refer to relevant specialist after first-line treatment. |
| **D** | Be able to make the diagnosis, know about the treatment, and refer to relevant specialist after first-line treatment. |
| **DT** | Be able to diagnose and treat. |
| **FU** | Be able to carry out long-term follow-up in primary care conditions. |
| **P** | Be able to implement preventive measures (primary, secondary, tertiary protection). |

**GENERAL SURGERY** **CLERKSHIP** **MEASUREMENT AND EVALUATION** **METHODS**

Written exam

**1.** Test (80%)

**2.** Classic written (20%)

Structured oral exam

Physical Examination on mannequin applications

1. Head and neck examination
2. Digital rectal examination
3. Abdominal examination
4. Breast examination

**CALCULATION OF SUCCESS**

The total score of the students is calculated to constitute 50% of the total score of the test and classical written exam, 45% of the oral exam and 5% of the mannequin exam.

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| **Exam Type** | **Percentage** |
| **Test and Written** **Exam** | 50% |
| **Structured Oral Exam** | 45% |
| **Model Exam** | 5% |

**RECOMMENDED** **REFERENCES FOR** **GENERAL SURGERY TRANIEES**

1. Principles of Schwartz Surgery – 11. Print – 2020
2. Schwartz's Principles of Surgery – 11th Edition – 2019
3. UpToDate –  [www.uptodate.com](http://www.uptodate.com/)
4. Medscape –  [www.medscape.com](http://www.medscape.com/)