IDPT7050

Operative and Perioperative Care

Course Goals

- 1. Develop the knowledge, attitude, and skills appropriate to care for adults who present with symptoms or problems commonly seen in general surgery.
- 2. Develop the knowledge and clinical skills necessary to assess and manage surgical wounds.
- 3. Develop the knowledge and skills to provide sterile technique and appropriately use personal protective equipment.
- 4. Develop the knowledge and skills necessary to evaluate a patient with a chief complaint of abdominal pain.
- 5. Identify and interpret common diagnostic imaging tests for peri-operative patients presenting with common surgical Present a concise and well-focused surgical patient consultation.
- 6. Recognize a patient requiring urgent or emergent surgical care.
- 7. Develop an awareness for the potential post-operative complications of surgical therapy.
- 8. Develop the knowledge and skills necessary to practice an evidence-based approach to medical care.

Clinical Learning Objectives

Clinical

Interprofessional Collaboration

1. Develop an appreciation of the importance of team-based care during a trauma resuscitation or operation.

Medical Knowledge for Practice

1. Describe common conditions that cause abdominal pain.

Patient Care

- 1. Describe the procedures that must be undertaken for a patient to go to the OR (site marking, consent, recent H/P).
- 2. Identify the indications for and interpret common imaging tests for investigating surgical conditions (ultrasound, CT scanning, plain x-rays).
- 3. Provide a prioritized differential diagnosis and select a working diagnosis following an encounter with a patient presenting with a surgical complaint.
- 4. Describe the important findings of an abdominal ultrasound of the gallbladder.
- 5. Prioritize the components of the patient's history in regards to various possible surgical conditions.
- 6. Recognize the most pertinent aspects of the physical examination for a variety of suspected surgical conditions.
- 7. Be able to identify risk factors for shock and hypotension.
- 8. Cite examples of a variety of potentially serious or life-threatening surgical conditions through clinical exposure as well as from organ-centered didactic lectures.
- 9. Identify indications for and interpret common diagnostic tests used for investigating abdominal pain.
- 10. Perform a focused physical examination of patients with abdominal pain.
- 11. Construct a prioritized differential diagnosis and select a working diagnosis following an encounter with a patient presenting with abdominal pain.

Practice-Based Learning and Improvement

1. Discuss the resources available to perform a literature search to fill a knowledge gap.

Professionalism

1. Utilize a checklist to ensure exposure to key surgical conditions.

Systems-Based Practice

1. Describe the importance of the weekly surgical M&M conference.

Didactic Learning Objectives

Abdominal Aortic Aneurysms (AAA) - Lecture

- 1. Discuss details of abdominal aortic aneurysms (AAA).
- 2. Discuss the surgical management of abdominal aortic aneurysms (AAA).

Abdominal Pain

- 1. Review patient presentation with right upper quadrant (RUQ) abdominal pain.
- 2. Differentiate between different types of acute abdominal pain.

Breast Disease - Lecture

- Develop an appreciation of the importance of the multidisciplinary team approach utilized in a contemporary breast clinic.
- 2. Demonstrate familiarity of a variety of breast disease conditions through didactic lecture.
- 3. Recognize pertinent anatomy regarding breast disease.
- 4. Recognize the common presentation and evaluation of breast cancer.
- 5. State the incidence of surgical management of breast cancer.
- 6. Recognize the utility of a multi-disease approach to breast cancer.
- 7. Describe the history, exam and work-up of breast disease.
- 8. Review indications for screening and diagnostic breast imaging.

Breast Mass

1. Interpret the patient presentation with a breast mass.

Cardiothoracic Surgery - Lecture

- 1. Describe common surgical conditions affecting the heart and lungs.
- 2. Discuss surgical management of heart and lung pathology.

Chest Trauma

1. Recognize the most common traumatic chest and thoracic cavity injuries.

Colorectal

Differentiate between benign and malignant colorectal pathology.

Diverticula

1. Recognize the most common, benign colorectal pathology.

Endocrine Disease

1. Demonstrate familiarity with endocrine disease that are treated surgically.

Esophagus

1. Identify the most common esophageal disorders, medical and surgical.

FAST Exam - Orientation

- 1. Discuss the clinical indication for FAST exam in surgery.
- 2. Describe the FAST exam.
- 3. Perform the FAST exam.

Fluids and Electrolytes - Lecture

- 1. Describe differences among common types of IV fluids.
- 2. Review strategies in choosing different resuscitative vs. maintenance fluids.
- 3. Describe how to calculate maintenance IV fluids.
- 4. Discuss the perils of excessive IV fluid administration.
- 5. Review common electrolyte imbalances.

Gallbladder

1. Review the pathologies associated with gallstone disease and the gallbladder.

GI Trauma

1. Recognize the presentation and workup of intra-abdominal trauma.

Groin Bulge

1. Review patient presentation with a painful groin bulge.

Informed Consent

- 1. Describe the purpose of the informed consent process.
- 2. Describe eight elements necessary by law for a valid informed consent process.
- 3. Identify ethical values that support the practice of informed consent.
- Describe the evidence, procedure and professional standard of care that Colorado Courts apply to resolve informed consent cases.
- 5. Describe the process for proxy decision makers for incapacitated adults in Colorado.
- 6. Describe informed consent for minors.
- 7. Identify ethical issues raised by DNR orders in the OR.

Iron Deficiency Anemia

1. Review patient presentation with iron deficiency anemia.

Lecture Endpoints of Resuscitation

- 1. Recognize the basics of shock and goal-directed resuscitation.
- 2. Describe the components of oxygen delivery.
- 3. Define shock and its common causes.
- 4. Discuss basic principles of resuscitation.
- 5. Apply the basic principles of resuscitation using a standard algorithm.

MEN Syndromes

1. Review the features of MEN (Multiple Endocrine Neoplasia) syndromes.

Musculoskeletal Trauma

1. Recognize the presentation and workup of musculoskeletal trauma.

Neuro Trauma

1. Recognize the presentation and workup of neurologic trauma.

Obstructive Jaundice

1. Review etiologies of painless jaundice, particularly malignant pathology.

Pancreas

1. Review medical and surgical management of pancreatitis.

Pharmacology of Pain Control - Orientation

- 1. Compare and contrast the pharmacologic aspects of the different multimodal analgesic agents.
- 2. Compare and contrast the principles of acute and chronic pain management.
- 3. Compare and contrast the general characteristics of the relevant analgesic drug classes (mechanism of action, pharmacokinetic parameters, adverse drug reactions).
- 4. Discuss the distinguishing characteristics of the individual pharmaceutical agents that are frequently used at UCH.

Preop Evaluation

1. Review comorbidities that increase surgical risk and must be optimized prior to surgery.

Shoulder Pain

1. Formulate treatment plan for a patient with traumatic injury.

Small Bowel

1. Identify the most common operative pathologies involving the small bowel.

Student Presentation

 Create and present a Power Point-based talk on a surgery or anesthesia topic to include a pertinent literature review.

Thyroid & Thyroid Nodules

- 1. Identify the medically managed, benign thyroid diseases.
- 2. Distinguish between the characterization of benign and malignant thyroid nodules.

Transplant Surgery - Lecture

- 1. Discuss the factors associated with limited organ availability for transplant.
- 2. Demonstrate familiarity with pertinent anatomy regarding liver and kidney transplant.

Trauma

1. Develop a systematic approach to trauma diagnosis and management.

Wound Care Lecture - Orientation

1. Explain and demonstrate basic wound assessment and management.