

Surgical Oncology (Gold) Service Educational Goals and Objectives

INTERN (PGY-1)

Medical Knowledge

Goals

- Understand the indications for adjuvant chemotherapy for colon cancer
- Understand the indications for adjuvant chemoradiotherapy for rectal cancer
- Understand the initial workup of patients with diagnosed colon cancer
- Understand the blood supply and lymphatic drainage of the colon and rectum
- Understand the sequence of evaluation for patients with obstructive jaundice at the level of the ampulla and at the bifurcation of the bile duct
- Understand algorithm for the evaluation of a new breast mass
- Understand the classification of benign and malignant breast lesions
- Understand the role of various biopsy techniques (open, needle localization, stereotactic, core, FNA)
- Know the major prognostic factors and staging system for malignant cutaneous melanoma.
- Know the major prognostic factors and staging system for adult soft-tissue sarcoma.
- Understand the clinical syndromes associated with excess peptide production for gastrin, VIP, somatostatin, glucagons and insulin.

Objectives

- Describe the arterial and lymphatic anatomy of the colon and rectum
- Describe the AJCC staging scheme for colon and rectal cancer
- Explain the workup sequence for patients presenting with obstructive jaundice at the level of the ampulla versus common bile duct
- Describe the vascular anatomy of the stomach and pancreas
- Explain a rational approach to colorectal cancer screening for average risk individuals
- Describe the evaluative sequence (including pertinent elements of history and physical examination) for patients with a new palpable breast mass
- Describe the evaluative sequency (including pertinent elements of history and physical examination) for patients with a new mammographically detected breast mass.
- Describe the key clinical features associated with tumors producing excessive gastrin, insulin, glucagons, somatostatin, and VIP

Patient Care

Goals

- Understand the process of preoperative preparation for patients undergoing colorectal resection
- Understand the management of malignant bowel obstruction
- Understand the metabolic perturbations following liver resection
- Understand routine drain and catheter management
- Understand late radiation toxicity and effects on wound healing
- Understand fluid and electrolyte replacement in patients undergoing complex GI cancer surgery.
- Understand appropriate drain management following axillary dissection.

Objectives

- Describe methods of bowel preparation for colon and rectal resection
- Describe the management sequence for a patient with a malignant small bowel obstruction
- Describe the biochemical and metabolic alterations that occur following major liver resection
- Explain the role of percutaneous drains in the management of postoperative abscess and fluid collection
- Describe the biology of late radiation change to small bowel and soft tissue
- Describe a fluid replacement strategy for a patient with a pancreatic fistula, small bowel fistula
- Describe the appropriate management of the axillary drain following axillary dissection.
- Present a patient in Melanoma Conference. Correctly list the patient's major prognostic factors and staging during the presentation.
- Present a patient in Sarcoma Conference. Correctly list the patient's major prognostic factors and staging during the presentation.

Professionalism

Goals

- Learn to communicate clearly, effectively and compassionately with patients, family, team members and staff
- Understand the principles of efficient and accurate medical communication for sign outs and hand offs
- Learn to place patients reactions to illness within their larger social and cultural backgrounds

- Learn the principles of informed patient decision making
- Respect patient confidentiality

Objectives

- Demonstrate consistent, clear communication with patients and families
- Demonstrate composure and equanimity under stress
- Demonstrate a spirit of helpfulness
- Demonstrate the ability to carefully and thoughtfully describe operative procedures to patients.

Interpersonal and Communication Skills

Goals

- Work as effective team members
- Cultivate a culture of mutual respect with members of nursing and support staff
- Develop patterns of frequent and accurate communication with team members and attending staff
- Gain an appreciation for both verbal and non verbal communication from patients and staff

Objectives

- Demonstrate consistent respectful interactions with members of nursing and support staff
- Demonstrate consistent, accurate and timely communication with members of the surgical team
- Demonstrate sensitivity and thoughtfulness to patients concerns, and anxieties.
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Practice-Based Learning

Goals

- Accept responsibility for all dimensions of routine patient management on the wards
- Apply knowledge of scientific data and best practices to the care of the surgical patient
- Facilitate learning of medical students and physician assistant students on the team.
- Use the OHSU library, databases on on-line resources to obtain up to date information and review recent advances in the care of the surgical patient.

Objectives

- Demonstrate a consistent pattern of responsible patient care and application of new knowledge to patient management
- Demonstrate teaching efforts with medical students and physician assistant students
- Demonstrate a command and facility with on line educational tools.

Systems-Based Practice

Goals

- Understand, review, and contribute to the refinement of clinical pathways
- Understand the cost implications of medical decision making
- Partner with health care management to facilitate resource efficient utilization of hospital resources

Objectives

- Describe in general terms the benefits of clinical pathway implementation
- Demonstrate consistency in working with healthcare management personnel in discharge planning

JUNIOR RESIDENT (PGY-3)

Junior resident is also responsible for all intern goals and objectives.

Medical Knowledge

Goals

- Understand the process of patient selection for neoadjuvant versus adjuvant therapy for rectal cancer.
- Understand the genetic defects in HNPCC
- Understand the surgical decision making for patients with distal rectal cancer: APR versus sphincter preservation
- Understand the mechanisms of 5-FU, Irinotecan, and Oxalaplatin
- Understand the role of endoscopic ultrasound in staging pancreatic cancer
- Appreciate the differences between a D1 and a D2 lymphadenectomy for gastric carcinoma
- Understand patient selection for breast conservation versus mastectomy for invasive breast cancer and DCIS.
- Understand patient selection for adjuvant chemotherapy.
- Understand patient selection for adjuvant hormonal therapy.

Objectives

- Describe the clinical criteria for which neoadjuvant chemoradiation would be the optimal treatment for rectal cancer
- Describe the genetic defects involved in the pathogenesis of HNPCC
- Explain the mechanisms of action of 5-FU, Irinotecan, and Oxalaplatin.

- Describe the different lymph nodes that are resected for D1 and D2 lymphadenectomy for gastric cancer
- Describe Endoscopic ultrasound findings that indicate that a patient with pancreatic cancer is unresectable.
- Describe stage specific guidelines for adjuvant chemotherapy.
- Describe specific contraindications to breast conserving therapy.
- Describe clinical guidelines and pathologic criteria for adjuvant hormonal therapy.

Patient Care

Goals

- Understand the appropriate staging and initial management of patients with rectal cancer
- Understand the appropriate staging and initial management of patients with a pancreatic tumor.
- Understand the aims of adjuvant therapy for rectal cancer and colon cancer
- Understand the diagnosis and evaluation of patients with cystic pancreatic tumors
- Understand the principles of oncologically sound colon resection
- Understand the anatomic principles (including orientation of incision) for lumpectomy and breast biopsy.
- Understand the anatomy of the axilla.
- Understand the work-up and management of primary melanoma.
- Understand the work-up and management options for extremity, truncal, and retroperitoneal adult soft tissue sarcomas.
- Understand the general strategy for localization of neuroendocrine tumors of the pancreas.

Objectives

- Describe the appropriate staging and evaluation of patients with known rectal cancer
- Describe the role of endoscopic ultrasound in determining surgical therapy for rectal cancer
- Describe the sequence of evaluation for a patient with a periampullary neoplasm
- Indicate when direct cholangiography (ERCP, PTC) is appropriate for patients with suspected pancreatic or bile duct malignancy
- Describe the sequence of technical maneuvers for right and left hemicolectomy for carcinoma
- Describe the management of postoperative pancreatic fistula
- Describe the operative approach to breast biopsy (including open and needle localization).
- Describe the anatomic landmarks and general approach to axillary lymph node dissection.
- Present a patient in melanoma conference. During the presentation correctly outline the rationale for the work-up and treatment.
- List the pros and cons of PET scan, CT's scans, Brain MR and CT, and LDH levels in the work-up of melanoma.
- Present a patient in Sarcoma Conference. During the presentation correctly outline the rationale for the work-up and treatment.
- Describe the correct options and techniques for biopsying extremity, truncal, and retroperitoneal sarcomas.
- Describe an appropriate localization strategy for a patient with a suspected pancreatic neuroendocrine tumor.

Professionalism

Goals

- Learn to assume an increased role in team leadership
- Gain increasing comfort with managing the complex emotional and psychosocial needs of cancer patients

Objectives

- Demonstrate increasing leadership by assuming increased supervision of intern and medical students, while attending to their needs for education and guidance
- Demonstrate sensitivity and composure while discussing complex medical issues with anxious patients

Interpersonal and Communication Skills

Goals

- Understand appropriate indications for referral to other oncologic specialists
- Effectively communicate with nursing and support staff to facilitate patient care
- Gain familiarity with telephone based patient assessment
- Understand the importance of the goals of cancer therapy and the distinction between curative and palliative therapy

Objectives

- Demonstrate appropriate transfer of information to other oncologic specialists
- Demonstrate effective communication with nursing and support staff to facilitate patient care
- Demonstrate thoughtful and timely telephone based patient assessment
- Articulate the difference between curative and palliative therapy and be able to provide examples

Practice-Based Learning

Goals

- Practice regular reviews of outcomes
- Gain increasing understanding of the literature regarding the management of clinical problems in surgical oncology
- Practice regular review of technical issues surrounding breast procedures, biopsies, soft tissue excisions and lymph node dissections

Objectives

- Demonstrate a pattern of regular review of outcomes for all cases
- Demonstrate a familiarity with relevant literature regarding the management of clinical problems in surgical oncology
- Demonstrate a pattern of consistent evaluation and ongoing improvement of technical approach to surgical oncology procedures

Systems-Based Practice

Goals

- Learn to assist in the coordination of multidisciplinary cancer care
- Gain an understanding of the function of a multidisciplinary cancer clinic
- Gain an understanding of expense of cancer care at the population level
- Understand the role of nursing, social work and support groups in the care of the cancer patient

Objectives

- Describe the importance of coordination of care in multidisciplinary cancer treatment
- Describe the cost of treatment with targeted therapy for one month for a patient with metastatic colorectal cancer
- Describe appropriate indications for referral of a cancer patient to social work, or to a counselor or psychologist

CHIEF RESIDENT (PGY-5)

Responsible for all Intern and Junior goals and objectives as well as the Chief specific goals.

Medical Knowledge

Goals

- Understand the advantages and disadvantages of preoperative versus postoperative chemoradiotherapy for rectal cancer
- Understand the indications and contraindications for a transanal resection for rectal cancer
- Understand the biology of KIT protooncogene and imatinib therapy for GIST
- Understand the anatomy of a D1 and D2 lymphadenectomy for gastric cancer
- Understand the importance of data from the GI Tumor Study Group in the decision-making regarding adjuvant therapy for resected pancreatic cancer.
- Understand segmental hepatic anatomy
- Understand the principles of inflow and outflow control in liver resection
- Understand the indications and contraindications to liver resection for colorectal liver metastases.
- Understand the indications for postmastectomy radiation.
- Understand the principles of sentinel node mapping, including definition of sentinel nodes and patient selection.
- Understand patient selection for neoadjuvant chemotherapy.
- Understand the difference between tamoxifen and aromatase inhibitors.
- Understand options for adjuvant/neo-adjuvant and palliative therapy of adult soft-tissue sarcomas.

Objectives

- Explain the advantages, disadvantages and principles of patient selection for neoadjuvant versus adjuvant therapy for rectal cancer
- List the indications and patient selection criteria for transanal excision for rectal cancer.
- Explain C-KIT biology
- Describe D1 and D2 lymph node stations
- Describe the results of the pivotal GI Tumor Study Group randomized trial of adjuvant therapy in resected pancreatic cancer.
- Describe the numbers and locations of the 8 hepatic segments.
- Describe several methods of inflow and outflow control for hepatectomy.
- Describe indications and contraindications for liver resection for hepatic colorectal metastases.
- Describe the steps of sentinel lymph node mapping and biopsy and describe risks of procedure.

- Describe appropriate stages and diagnoses that would be appropriate for referral for neoadjuvant chemotherapy for breast cancer.
- Describe the major types of postmastectomy breast reconstruction including advantages and limitations of each method.
- Describe the hormonal mechanism of tamoxifen versus aromatase inhibitors.
- Name the most active systemic agents used for sarcoma and state at least 1 side effect for each drug.

Patient Care

Goals

- Understand the operative sequence for standard and pylorus preserving pancreaticoduodenectomy.
- Understand the approach and anatomic specifics of autonomic nerve preserving mesorectal excision for rectal cancer
- Understand the operative approach to liver resection, including the importance of central venous pressure management
- Understand the principles of gastric resection for carcinoma
- Understand the principles of GIST surgery for primary and metastatic disease.
- Understand the principles of patient selection and operative approach for laparoscopic colectomy.
- Understand criteria for the identification of patients at high risk for breast cancer (ADH, LCIS, BRCA).
- Understand the operative approach, including contraindications for skin sparing mastectomy.
- Understand options for adjuvant and palliative therapy of melanoma
- Know the conduct of basic operations for node positive melanoma, including groin and axillary dissections.
- Know the conduct of basic operations for extremity, truncal, and retroperitoneal sarcomas.
- Understand the operative approach for a patient with a suspected gastrinoma.

Objectives

- Describe the operative sequence for standard and pylorus preserving pancreaticoduodenectomy.
- Demonstrate the hypogastric pelvic plexus and the plane of mesorectal dissection.
- Describe the operative approach to liver resection including right side versus left side resections.
- Describe the appropriate operative approach including lymph node dissection for tumors of the distal stomach, body, cardia, and GE junction.
- Describe the operative approach for GIST of the stomach, or small bowel.
- Describe the criteria for identification of patients at high risk for breast cancer.
- Describe the operative approach for skin sparing mastectomy.
- Describe the management of a patient with ADH, LCIS, or BRCA positive.
- Describe the indications for breast MRI.
- Tell the indications and side effects of adjuvant interferon. Briefly describe the dose-schedule.
- Describe at least 3 options for the treatment of metastatic melanoma.
- List or demonstrate the proper steps in a standard axillary dissection and inguinal/femoral lymph node dissection. Tell the indications and side effects for each operation.
- Tell the indications and side effects of adjuvant/neo-adjuvant treatment of extremity, truncal, and retroperitoneal adult soft tissue sarcomas.
- Describe the indications/contraindications for chemotherapy and surgery for the treatment of metastatic sarcoma.
- List or demonstrate the proper steps in a standard resection for extremity sarcoma.
- Describe the appropriate operative approach for a patient with a suspected, but non localized gastrinoma.

Professionalism

Goals

- Understand the role of the chief resident as team leader.
- Develop professional commitment to care for cancer patients on the Gold service.
- Foster respectful communication between patients, team members, students and staff

Objectives

- Demonstrate the leadership by example and by providing for the needs of other members of the surgical team.
- Demonstrate consistent and compassionate care for cancer patients on the Gold service.

Interpersonal and Communication Skills

Goals

- Develop an ability to communicate complex medical information to anxious patients.
- Develop effective team-building skills.
- Learn how to honestly and thoughtfully relay bad news to patients and families.
- Learn how to assess patients' knowledge of their disease process.
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Objectives

- Demonstrate an ability to communicate complex medical information to anxious patients.
- Demonstrate effective team-building skills as evidenced by satisfaction of junior level residents and medical students.
- Be able to describe a general approach to delivery of bad news.
- Describe an interview technique which allows the examiner to gauge the patients' understanding of their disease.

Practice-Based Learning**Goals**

- Gain experience with using a case based conference (Gold Teaching Conference) as an educational tool.
- Evaluate the literature to support or question surgical oncology practices.
- Review outcomes with the team to improve and enhance learning.

Objectives

- Demonstrate the ability to select cases and guide preparation to optimize the benefits from a case based conference.
- Demonstrate that relevant literature is used in making clinical decisions
- Demonstrate that outcomes are discussed and reviewed as a team.

Systems-Based Practice**Goals**

- Understand the surgical oncologists role in coordinating multidisciplinary cancer care.
- Understand the importance of multidisciplinary decision making at the early stage of treatment.
- Understand the organization of a multidisciplinary clinic

Objectives

- Describe the surgical oncologists role in coordinating multidisciplinary cancer care for patient a variety of complex malignancies.
- Describe the potential pitfalls that arise if appropriate multidisciplinary input is not obtained prior to treatment initiation.
- Describe the organization of a multidisciplinary clinic for example, for breast cancer.