



Evaluation & Management of Patients with Other Gastrointestinal Tumors

Description of the Activity	Surgical oncologists are expected to evaluate and manage patients who present with a gastrointestinal (GI) or mesenteric neoplasm found incidentally or after a diagnostic workup. Surgical oncologists must be able to accurately and cost-effectively diagnose, treat, and provide guideline-concordant surveillance for adult patients with a variety of GI or mesenteric neoplasms and recognize that a GI or mesenteric mass may be part of complex disease that requires multidisciplinary treatment.
Functions	<ul style="list-style-type: none">❖ Nonoperative/Preoperative<ul style="list-style-type: none">➤ Synthesize essential information from a patient's records, history, physical examination, and initial diagnostic evaluations to develop a differential diagnosis.➤ Complete a cost-effective, efficient, evidence-based diagnostic or staging evaluation per accepted guidelines.<ul style="list-style-type: none">▪ Describe the role of diagnosis-specific imaging modalities (Ga-68 dotatate/positron emission tomography, magnetic resonance imaging, computed tomography).▪ Discuss the need for and method to obtain tissue for diagnosis.▪ Complete biochemical and genomic testing when indicated.➤ Identify the variability in guideline-adherent staging and preoperative evaluation based on the type of GI tumor for the following:<ul style="list-style-type: none">▪ GI mass or neoplasm of indeterminate malignant behavior▪ GI neuroendocrine tumor (NET)▪ Gastrointestinal stromal tumor (GIST)▪ Lymphoma▪ Small bowel adenocarcinoma➤ Communicate a diagnosis and potential treatment options to the patient/caregiver(s) and consultants. Use shared decision-making to develop a treatment plan consistent with a patient's goals and beliefs.➤ Succinctly identify treatment goals, including curative intent, life prolongation without curative option, palliation, or end-of-life care. Communicate sympathetically in a culturally appropriate manner when de-escalation of care is indicated because of poor prognosis or based on the patient/caregiver's goals of care.➤ Use current evidence-based literature to develop the correct sequence of oncologic treatment, including surgery, neoadjuvant or adjuvant therapy (eg, cytotoxic chemotherapy, targeted therapy), radiation, and other treatments as necessary. Select a treatment approach based on disease presentation, comorbid conditions, and patient preferences. Clarify that the treatment varies based on the final diagnosis. For each neoplasm:<ul style="list-style-type: none">▪ Describe and consider predictors of biological risk for specific diagnoses, including genetics, when appropriate.▪ Compare local excision/resection with formal anatomic or en bloc resection, and consider the potential role of neoadjuvant therapy for downstaging for resection with minimal morbidity.▪ Identify the need for cholecystectomy in patients undergoing treatment with somatostatin analogs.▪ Discuss potential nonoperative strategies (eg, observation for a low-risk NET).▪ Determine the role of debulking for advanced locoregional or metastatic disease in specific diagnoses.▪ Review the role of liver-directed therapies in the metastatic setting.➤ Participate in a multidisciplinary conference or discussion regarding treatment plans to define an optimal treatment approach.



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- Collaborate with other specialties to manage comorbidities that will affect treatment (eg, chronic anticoagulation, cardiac disease, immunosuppression).
 - Obtain informed consent with cultural humility.
 - Describe the indications, risks, benefits, alternative therapies, and potential complications of the planned procedure, and incorporate a discussion of the goals of care.
 - Ensure patient/caregiver comprehension using applicable language services and audio/visual aids as necessary.
 - Ensure that the patient/caregiver(s) can ask questions and address any expressed concerns, taking patient/caregiver preferences into account.
 - Discuss potential limitations in the desire for resuscitation (eg, do-not-resuscitate order) and how this will be addressed in the perioperative period.
 - Document the consent discussion.
- Develop a comprehensive perioperative plan for preoperative optimization with enhancement of nutrition and mobility, smoking cessation, and diabetes control.
- Synthesize an operative plan that demonstrates an understanding of the operative approach, anatomy, physiology, indications, contraindications, risks/benefits, operative alternatives, and possible complications.
- ❖ Intraoperative
 - Manage the perioperative environment, including room setup, equipment checks, preprocedural time-out, specimen processing, counts, wound classification, and debriefing functions.
 - Develop a safe anesthetic approach for the clinical situation in collaboration with in-office staff or the anesthesiology team, depending on the environment selected for the procedure.
 - Create and maintain an intraoperative environment that promotes safety and patient-centered care.
 - Position the patient to expose the operative field, taking precautionary measures to prevent iatrogenic injury, and consider the need for potential procedural adjuncts (eg, esophagogastroduodenoscopy, cholangiogram, lower endoscopy).
 - Confirm accessibility of necessary equipment. Coordinate with other members of the operating room team to use specialized equipment or procedures such as upper/lower endoscopy. Coordinate potential adjunct procedures with other surgical services (eg, ureteral stents).
 - Perform the planned procedures for the specific pathology with consideration of guideline-concordant surgical margins, handling of tissue and tumors (eg, avoiding rupture of GIST), control of regional and metastatic disease, and potential palliative interventions.
 - Debate the role of minimally invasive versus open resection approaches pending disease pathology and patient factors.
 - Adapt operative steps and the operative plan based on intraoperative findings, communicating with consulting services and caregivers when necessary.
- ❖ Postoperative
 - Direct postoperative care.



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	<ul style="list-style-type: none">➤ Manage common early and late complications related to GI tumor resections, including anastomotic leaks, hemorrhage, bowel ischemia, ostomy management, delayed gastric emptying, postoperative pain, and incontinence.➤ Manage other postoperative complications that are related to large abdominal oncologic operations but not unique to GI tumors, such as pulmonary embolism, aspiration, other cardiopulmonary complications, nutritional problems, and other systemic problems.➤ Communicate a postcounter plan with a patient/caregiver(s) and other health care team members that considers intraoperative and pathologic findings, future treatment needs, postcounter needs, outcome expectations, prognosis, and follow-up.➤ Recognize and mitigate patient-specific barriers to care.➤ Coordinate care with other specialties and ancillary care as needed (eg, physical therapy, rehabilitation, nutrition services) to ensure safe, timely discharge planning.➤ Review intraoperative and pathologic findings in a multidisciplinary tumor board, and modify the treatment plan if indicated.<ul style="list-style-type: none">▪ Discuss the role of mutational testing for risk stratification and its impact on adjuvant treatment strategies.▪ Advocate for a patient's goals of care.▪ Assess the potential need for additional resections.➤ Develop a plan for surveillance after the initial treatment of the GI tumor.
Scope	<ul style="list-style-type: none">❖ In scope<ul style="list-style-type: none">➤ Diagnoses<ul style="list-style-type: none">▪ GI NETs, including appendiceal NETs▪ GI stromal tumors▪ GI tumors of indeterminate malignant potential (eg, with no tissue diagnosis)▪ Lymphoma with GI involvement▪ Small bowel adenocarcinoma➤ Procedures<ul style="list-style-type: none">▪ Gastrectomy<ul style="list-style-type: none">● Subtotal gastrectomy● Total gastrectomy● Wedge resection▪ Enterectomy▪ Partial colectomy▪ Proctectomy▪ Appendectomy▪ Transanal excision▪ Lymphadenectomy in conjunction with the above as appropriate for indication▪ Multivisceral resection in conjunction with the above▪ Open and minimally invasive techniques



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- Appropriate referral to multidisciplinary specialists for definitive endoscopic management
- Populations
 - Adults, including those with hereditary syndromes
- ❖ Out of scope
 - Diagnoses
 - Appendiceal adenocarcinoma
 - Benign neoplasms
 - Colon and rectal adenocarcinoma
 - Malignant small bowel obstruction
 - Metastatic small bowel tumors
 - Mucinous appendiceal neoplasms
 - Pancreatic NETs
 - Peritoneal surface malignancies
 - Primary liver NETs
 - Secondary malignant neoplasms of the colon
 - Procedures
 - Incidental en bloc/multivisceral resections for other indications
 - Populations
 - Pediatric patients



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<p>1</p> <p>Limited Participation</p> <p>Demonstrates understanding of information and has very basic skills.</p> <p>Framework:</p> <p>Performs at the general surgery resident level, lower than expected for a typical residency graduate. Has some experience with simple cases but has been an observer of complex cases.</p>	<ul style="list-style-type: none">For a patient presenting with an intra-abdominal neoplasm (GIST, GI lymphoma, small bowel adenocarcinoma, GI NET, mass of unknown origin), synthesizes essential information from the patient's records, H&P, family history, and initial diagnostic evaluations to develop a differential; needs prompting to develop a diagnostic and treatment planDescribes tumor-specific biopsy techniques; identifies surgical options and when a procedure may be indicatedDescribes a cost-effective, evidence-based diagnostic or staging evaluation, including the use of biochemical testing and diagnosis-specific imaging modalities such as DOTA/PET, MRI, and CT as indicatedConsiders the role of a multidisciplinary tumor board and participates in but cannot lead a case discussion; needs guidance to develop a multidisciplinary treatment planTakes a family history that includes malignancies related to hereditary syndromes (eg, FAP and Gardner syndrome for a patient with desmoid tumors)Recognizes the potential role for medical and radiation therapy and surgery in a patient with an intra-abdominal neoplasm; lists broad categories of multimodal	<ul style="list-style-type: none">Lists potential intraop findings (eg, unidentified metastatic disease, invasion into adjacent structures)Needs prompting to assess resection margins and the need for or extent of lymphadenectomyDemonstrates basic knowledge of tumor-specific biology and how it affects intraop decision-making (eg, demonstrates awareness of tissue-handling techniques such as avoiding GIST rupture)Creates a basic operative note but omits some important information; may need prompting for timeliness	<ul style="list-style-type: none">Recognizes that pathologic findings and staging can impact oncologic therapeutic decisions (eg, need for adjuvant therapies)Identifies a patient who will need a surveillance plan postoperatively based on pathologic staging and clinical risk assessment and needs assistance to describe the surveillance planExplains the basic principles of cancer biology related to a patient's diagnosisLists broad categories of multimodal oncologic therapies based on operative findings and final tissue diagnosisAccesses evidence-based guidelines for postop care and surveillance but needs assistance to formulate a plan based on tumor factors and patient preferencesDocuments postop care but may omit nuances of progress or minor complications; may choose an inappropriate means of communication (paging for minor details or email for urgent issues)



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	<p>oncologic therapies but may need prompting to differentiate immunotherapies, cytotoxic chemotherapies, and targeted medical therapies (eg, rules out lymphoma, which would require initial nonoperative management)</p> <ul style="list-style-type: none"> When prompted, accesses available evidence to develop the correct sequence of treatment (eg, surgery, systemic therapy) Records information in a patient’s record but may omit some important information or include some extraneous information; requires correction or augmentation of documentation of services; may need prompting for timeliness 		
<p style="text-align: center;">2</p> <p><u>Direct Supervision</u></p> <p>Manages cases at the level of a newly graduated general surgery resident. Manages less complicated cases independently but needs active guidance for complex cases.</p> <p><u>Framework:</u></p>	<ul style="list-style-type: none"> Demonstrates understanding that a patient presenting with an intra-abdominal neoplasm (GIST, GI lymphoma, small bowel adenocarcinoma, GI NET, mass of unknown origin) will need a multidisciplinary diagnostic and treatment plan but needs ongoing assistance to describe this plan Orders an evidence-based diagnostic and staging evaluation, including biochemical testing and diagnosis-specific imaging modalities such as DOTA/PET, MRI, and CT as needed, but needs prompting to consider cost-effectiveness 	<ul style="list-style-type: none"> Identifies intraop findings (eg, unidentified metastatic disease, invasion into adjacent structures) but requires redirection when encountering unanticipated findings Assesses resection margins and the need for or extent of lymphadenectomy with assistance Demonstrates knowledge of intraop findings that might change the surgical plan, including the extent of resection (eg, need for cholecystectomy in a patient with NET who may receive 	<ul style="list-style-type: none"> Describes a multimodal postop treatment plan but needs guidance to refine it by incorporating patient factors, final pathologic staging, and tumor-specific biology With assistance, integrates patient-specific factors and tumor biology to describe an evidence-based surveillance timeline or survivorship care plan Assimilates cancer biology knowledge, using tissue results and genetic testing to guide postop management, including the potential need for further



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<p>The learner can manage simple or straightforward cases.</p> <p>The learner may require guidance in managing multidisciplinary care (eg, planning neoadjuvant treatment or postoperative chemotherapy).</p> <p>During surgery, the attending gives active help throughout the case to maintain forward progression.</p>	<ul style="list-style-type: none">• Participates in a multidisciplinary tumor board discussion to develop a treatment plan but needs assistance to guide the discussion; demonstrates awareness of multidisciplinary treatment options but needs guidance to formulate multimodality treatment• Describes the cancer biology of tissue results or genetic testing but needs assistance to incorporate this knowledge into medical decision-making• Details a patient's preop imaging, biopsy results, tumor biology, staging data, and patient-specific history; names standard multimodal oncologic therapies but needs assistance applying unique patient and biological factors to nonstandard treatment pathways• Recites standard oncologic operative strategies, including proper tissue handling, but has difficulty comparing resection approaches with nonoperative strategies and incorporating the potential role of neoadjuvant therapy for downstaging to minimize morbidity (eg, need for neoadjuvant therapy for GIST and NET).• Accesses available evidence to develop the correct sequence of treatment (surgery, systemic therapy) but needs assistance to elicit patient preferences when guiding care	<p>somatostatin analogs), surgical margins, or need for further pathological workup; needs assistance to describe the details of this updated plan</p> <ul style="list-style-type: none">• Creates an operative note with a complete description of the procedure	<p>diagnostic assessment or additional procedural interventions</p> <ul style="list-style-type: none">• Describes how patient-specific factors and tumor data determine which tailored multimodal oncologic therapies are needed postoperatively and needs assistance to describe the proper sequence or a final tailored plan• Requires prompting to elicit patient preferences and values to guide evidence-based adjuvant care and surveillance• Thoroughly documents a patient's postop progression and the presence of any complications within the plan of management



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3 <u>Indirect Supervision</u> Can do a basic operation but will not recognize abnormalities and does not understand the nuances of an advanced case. Manages multidisciplinary care of straightforward cases. Seeks assistance in managing complex cases. <u>Framework:</u> The learner can perform the operation in straightforward circumstances. The attending gives passive help. This help may be given while scrubbed for more complex cases or during check-in for more routine cases.	<ul style="list-style-type: none"> • Demonstrates organized diagnostic and therapeutic reasoning through notes in a patient's record; demonstrates timely and efficient use of the EHR to communicate with the health care team 	<ul style="list-style-type: none"> • With assistance, refines the preop surgical plan based on information discovered intraoperatively (eg, unidentified metastatic disease, invasion into adjacent structures) • Independently identifies the need to assess resection margins and the need for or extent of lymphadenectomy • Demonstrates comprehensive knowledge of tumor biology in the context of intraop findings and how they impact the preop surgical plan, including the extent of resection or need for further pathological workup; describes the details of this updated plan with limited assistance • With assistance, refines the surgical plan based on intraop findings; discusses surgical options with the attending (eg, recognizes important or aberrant anatomy and potential pitfalls) • Creates an operative note with a complete description of the procedure, including key intraop findings; documents anatomic or disease variants in a thorough and understandable way 	<ul style="list-style-type: none"> • With prompting, applies a multimodal postop treatment plan that incorporates most patient factors, final pathologic staging, and tumor-specific biology; refines the treatment plan with prompting • With prompting, follows an evidence-based surveillance plan, when available, and recognizes the need for a survivorship care plan; identifies the need for additional tumor testing that may impact oncologic therapy and surveillance • With prompting, applies cancer biology knowledge and identifies opportunities for additional referrals (eg, genetic testing, medical and radiation oncology) that may impact postop care • With assistance, assimilates cancer biology knowledge, using tissue results and genetic testing to guide postop management, including the need for potential further diagnostic assessment or additional procedural interventions • Describes patient-specific factors and tumor data to determine which tailored



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	<ul style="list-style-type: none"> With prompting, demonstrates knowledge of data to support the use of multimodal oncologic therapies and their impact on surgical treatment (eg, use of preop radiation or systemic therapy to affect an operative plan and minimize morbidity) Independently integrates oncologic information with patient-specific factors to design a succinct diagnostic and workup plan and adjusts the plan based on available evidence in a straightforward case Concisely integrates all relevant data from outside systems and prior encounters and reports diagnostic and therapeutic reasoning in a patient's record 		<p>multimodal oncologic therapies are needed postoperatively but needs prompting to describe the proper sequence or final tailored plan</p> <ul style="list-style-type: none"> Locates and applies the best available evidence for adjuvant therapies and surveillance, integrated with patient preferences Appropriately selects direct (telephone, in-person) and indirect (progress notes, secure text messages) forms of communication based on context and urgency
<p style="text-align: center;">4</p> <p style="text-align: center;"><u>Practice Ready</u></p> <p style="text-align: center;">Manages complex disease presentations and performs complex operations independently. Guides a multidisciplinary approach to complex cases. Performs as an expert consultant in surgical oncology</p> <p style="text-align: center;"><u>Framework:</u></p>	<ul style="list-style-type: none"> Independently and succinctly develops a multidisciplinary diagnostic and treatment plan for a patient presenting with an intra-abdominal neoplasm (GIST, GI lymphoma, small bowel adenocarcinoma, GI NET, mass of unknown origin) Leads a multidisciplinary cancer care conference to synthesize patient care plans for routine and complex cases, resolving conflict when needed; independently coordinates multidisciplinary care Independently orders a cost-effective, evidence-based diagnostic or staging evaluation, including biochemical testing and diagnosis-specific imaging modalities 	<ul style="list-style-type: none"> Independently identifies the need to assess resection margins and the need for or extent of lymphadenectomy in straightforward and complex cases Demonstrates comprehensive knowledge of tumor biology in the context of intraop findings and how they impact the surgical plan, including the extent of resection or need for further pathological workup; describes the details of this updated surgical plan with limited assistance Independently refines the surgical plan based on common intraop findings, including the extent of resection, surgical margins, or need for further pathological 	<ul style="list-style-type: none"> Independently customizes a multimodal postop treatment plan based on patient factors, final pathologic staging, and tumor-specific biology Independently integrates patient-specific factors and tumor biology to coordinate an evidence-based surveillance timeline or survivorship care plan Independently assimilates cancer biology knowledge, using tissue results and genetic testing to guide postop management, including the need for potential further diagnostic assessment or additional procedural interventions



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<p>The learner can treat all common variations of the disease and has a strong understanding of surgical and medical options for different presentations.</p> <p>The attending is available at the request of the learner but is not routinely needed for common presentations, though input may be needed for more complex or unusual presentations.</p>	<p>such as DOTA/PET, MRI, and CT as indicated</p> <ul style="list-style-type: none">Independently incorporates family history and cancer biology knowledge into medical decision-making, including using tissue results and genetic testing to guide further diagnostic assessment and management (eg, benefits of debulking of metastatic disease for patients with NETs)Independently incorporates preoperative imaging, biopsy results, tumor biology, staging data, and patient-specific history to select tailored multimodal oncologic therapyIndependently compares local excision/resection with formal anatomic or en bloc resection, the potential role of neoadjuvant therapy for downstaging for resection to minimize morbidity, nonoperative strategies, and possible debulking strategiesIndependently integrates oncologic information with patient-specific factors to design a succinct diagnostic and workup plan and adjusts the plan based on available evidence in a complex or unusual presentationCommunicates diagnostic and therapeutic reasoning clearly, concisely, promptly, and in organized written form, including anticipatory guidance; written or verbal	<p>workup before completing the final surgical plan</p> <ul style="list-style-type: none">Creates an operative note with a complete description of the procedure, a rationale for modifications of the operative plan, and documentation of anatomic or disease variants	<ul style="list-style-type: none">Independently applies patient-specific factors and tumor data to determine which tailored multimodal oncologic therapies are needed postoperatively and in what sequenceCritically appraises evidence-based rationale for adjuvant therapies, even in the face of uncertain or conflicting evidenceCommunicates clearly, concisely, promptly, and in an organized written form, including anticipatory guidance so the postop plan of care is clear to other members of the health care team



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	communication (patient notes, email) serves as an example for others to follow		