



Evaluation & Management of a Patient with Cutaneous and Subcutaneous Neoplasms

Description of the Activity	Cutaneous and subcutaneous neoplasms are conditions commonly encountered by general surgeons in the outpatient and elective care setting. All general surgeons must be able to treat benign and malignant diseases of the skin and subcutaneous tissue in adult patients.
Functions	<ul style="list-style-type: none">❖ Nonoperative/Preoperative<ul style="list-style-type: none">➤ Synthesize information from the patient’s medical records, history, physical examination, and existing diagnostic evaluations to develop a differential diagnosis.➤ Determine if additional preoperative workup is needed, including imaging studies such as computed tomography, magnetic resonance imaging, and lymphoscintigraphy, based on specific disease pathologies.➤ Define the extent of surgery required (including the need for sentinel lymph node biopsy versus lymphadenectomy), integrating any obtained findings of additional preoperative workup.➤ Direct or perform biopsy procedures needed to facilitate the diagnosis and management of cutaneous and subcutaneous lesions and neoplasms.➤ Obtain informed consent with cultural humility.<ul style="list-style-type: none">▪ 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.▪ Ensure that the patient/caregiver(s) can ask questions, and address any expressed concerns, taking patient/caregiver preferences into account.▪ Document the consent discussion.❖ Intraoperative<ul style="list-style-type: none">➤ Manage the perioperative environment, including room setup, equipment check, 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 performance of the procedure.➤ Collaborate with other perioperative health care professionals to create and maintain an intraoperative environment that promotes safe patient care.➤ Position the patient to expose the operative field, taking precautionary measures to prevent iatrogenic injury.➤ Confirm accessibility of necessary equipment.➤ Develop an initial operative plan that demonstrates understanding of the patient’s pathology, anatomy, physiology, indications, contraindications, and potential complications.➤ Perform operative interventions such as:<ul style="list-style-type: none">▪ Wide local excision<ul style="list-style-type: none">• Mark out margins (based on current evidence-based guidelines).• Visualize and respect tissue planes; identify and dissect relevant normal and abnormal anatomy; dissect around, but not into, the lesion being excised, and maintain margins.



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	<ul style="list-style-type: none">• Orient specimens based on institutional protocols.• Use frozen sections intraoperatively for pathologies in which margin assessment is needed.• Maintain awareness of and perform simple reconstruction options to close large defects.▪ Perform sentinel lymph node biopsy based on current evidence-based guidelines.• Use adjuncts to identify sentinel lymph nodes.➤ Integrate new information discovered intraoperatively to modify the operative plan if any of the following situations are encountered:<ul style="list-style-type: none">▪ Infected lesions, such as cysts or hematomas (primary wound closure versus healing by secondary intention)▪ Larger than anticipated cutaneous defects following excision, requiring subspecialist consultation▪ Lymphadenopathy not identified preoperatively▪ Satellite or in-transit lesions❖ Postoperative<ul style="list-style-type: none">➤ Communicate a postencounter plan with a patient/caregiver(s) and other health care team members that considers location, postencounter needs, outcome expectations, and follow-up.➤ Include a specific plan for wound care.➤ Develop a postencounter plan that includes analysis of patient-specific barriers to care.➤ Provide surveillance follow-up care for disease recurrence that is guideline adherent.➤ In the setting of malignancy, communicate with both the multidisciplinary cancer care team and the patient/caregiver(s) to ensure that further diagnostic workup and management plans are understood.➤ Recognize early and late complications related to procedures performed for management of cutaneous and subcutaneous neoplasms.<ul style="list-style-type: none">▪ Chronic pain▪ Hematoma▪ Recurrence of neoplasm▪ Seroma▪ Wound infection
Scope	<ul style="list-style-type: none">❖ In-scope diagnoses<ul style="list-style-type: none">➤ Epidermal inclusion cyst➤ Hematoma➤ Lipoma/neuroma/leiomyoma/lymphangioma➤ Melanoma and nevi➤ Nonmelanoma skin cancers➤ Basal cell carcinoma➤ Squamous cell carcinoma❖ Out-of-scope diagnoses<ul style="list-style-type: none">➤ Cystic lesions of the neck➤ Desmoids/fibromatosis



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- Sarcoma (inclusive of lymphangiosarcoma)

- ❖ In-scope procedures

- Excisional biopsy
- Incisional biopsy
- Sentinel lymph node biopsy
- Wide local excision

- ❖ Out-of-scope procedures

- Completion lymphadenectomy



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<p style="text-align: center;">1</p> <p style="text-align: center;"><u>Limited Participation</u></p> <p>Demonstrates understanding of information and has very basic skills</p> <p style="text-align: center;"><u>Framework:</u> What a learner directly out of medical school should know</p> <p>The attending can show and tell.</p>	<ul style="list-style-type: none"> Obtains an H&P with cultural humility, including a focused dermatologic exam of the lesion Develops a differential that includes most common cutaneous and subcutaneous neoplasms but may omit less common diagnoses Describes 1 or 2 biopsy techniques Describes the “ABCDE” of a skin lesion that is concerning for malignancy Respectfully communicates basic facts about the condition to a patient/caregiver(s) but inconsistently uses applicable language services and audio/visual aids Communicates the elements of an informed consent discussion but omits some elements when documenting the discussion Identifies specialties involved in interdisciplinary care, including medical oncology and radiation therapy, but needs guidance to understand sequencing of approaches Applies evidence-based literature to guide the use of lab and imaging studies for assessment and staging as indicated 	<ul style="list-style-type: none"> Identifies the basic anatomy of the skin and subcutaneous tissues Assists with surgical positioning, patient preparation, and adequate exposure with retraction; performs superficial wound closure Makes a skin incision along a marked outline drawn by a supervisor Requires active instruction to move the operation forward Identifies tissue planes with active guidance and retraction Handles instruments inefficiently and with limited dexterity; displays incomplete understanding of tissue handling Demonstrates respect for and engages in communication with all members of the OR team Demonstrates uncertainty about the necessary equipment for the operation 	<ul style="list-style-type: none"> Communicates a basic postop plan to a patient/caregiver(s), needing prompting to clarify expected outcomes and the anticipated treatment course Describes common postop complications such as hematoma or infection, requiring help to articulate or recognize signs of these complications Provides updates and answers straightforward questions from a patient/caregiver(s) in a respectful and understandable way Attends and, if requested, presents at an interdisciplinary conference when involved in the care of a patient with a skin neoplasm Respectfully requests a consultation with medical and radiation oncology for adjuvant treatment of a malignant neoplasm Accesses evidence-based guidelines for treatment of cutaneous and subcutaneous neoplasms
<p style="text-align: center;">2</p> <p style="text-align: center;"><u>Direct Supervision</u></p> <p>Demonstrates understanding of the steps of the operation but requires direction through</p>	<ul style="list-style-type: none"> Respectfully communicates basic facts about the diagnosis to a patient/caregiver(s); uses applicable language services and audio/visual aids Evaluates a patient with a cutaneous or subcutaneous neoplasm and identifies risk 	<ul style="list-style-type: none"> Marks out the correct margins of excision for a skin neoplasm with active help Interprets single-node lymphoscintigraphy for sentinel lymph node biopsy (SLNB) 	<ul style="list-style-type: none"> Oversees routine postop care, including use of multimodal pain management strategies Recognizes common postop complications such as hematoma, seroma, and infection, requiring assistance to manage them



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<p>principles and does not know the nuances of a basic case</p> <p>Framework: The learner can use the tools but may not know exactly what, where, or how to do it.</p> <p>The attending gives active help throughout the case to maintain forward progression.</p>	<p>factors for malignancy, including family history and environmental exposures</p> <ul style="list-style-type: none">• Orders and interprets imaging and other diagnostic tests as indicated• Gathers needed instruments and equipment and initiates biopsy of a suspicious skin lesion• Demonstrates understanding of differences between melanoma and nonmelanoma regarding treatment and additional tests needed for accurate staging workup (lab and imaging studies)• Communicates the elements of an informed consent discussion in a straightforward case and completely documents the discussion• Attends an interdisciplinary care conference and presents information from a surgical perspective to other specialists (eg, medical oncology, radiation oncology, pathology, radiology)• Applies evidence and incorporates patient preferences when planning removal of a cutaneous or subcutaneous neoplasm	<ul style="list-style-type: none">• Performs wide local excision and SLNB in a straightforward case with guidance• Correctly orients the specimen for pathology with assistance• Completes tissue dissection without violating the lesion• Provides examples of unexpected intraoperative findings, such as in-transit melanoma, lymphadenopathy not identified preoperatively, or atypical lipomas, but is unable to identify them intraoperatively• Demonstrates inconsistent skin and subcutaneous tissue-handling skills• Demonstrates understanding of common positioning options but cannot name factors to select one over another; identifies the importance of protecting against nerve and pressure injuries but cannot describe resulting morbidity• Requires assistance to control bleeding• Communicates clearly with all members of the health care team in the OR• Demonstrates understanding of necessary equipment for the operation but requires assistance to coordinate with perioperative staff to ensure it is available	<ul style="list-style-type: none">• Conveys but does not independently develop a postcounter plan that includes postop patient care needs, outcome expectations, and follow-up• Assists with patient-specific barriers to care, such as access to wound VACs• Participates in an interdisciplinary cancer care conference• Describes some elements of evidence-based treatment guidelines for benign or malignant cutaneous/subcutaneous neoplasms



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<p style="text-align: center;">3</p> <p style="text-align: center;"><u>Indirect Supervision</u></p> <p>Can do a basic operation but will not recognize abnormalities and does not understand the nuances of an advanced case</p> <p style="text-align: center;"><u>Framework:</u></p> <p>The learner can perform the operation in straightforward circumstances.</p> <p>The attending gives passive help. This help may be given while scrubbed for more complex cases or during a check-in for more routine cases.</p>	<ul style="list-style-type: none"> ● Obtains a straightforward patient’s history and communicates their medical condition across barriers and cultural differences in a respectful way ● Develops and helps coordinate a treatment plan for a malignant neoplasm, including an operative plan, considering patient comorbidities (eg, no SLNB in those unable to tolerate dissection or adjuvant therapy) ● Describes and performs a punch biopsy; describes and initiates other biopsy techniques ● Describes additional tests needed for accurate and comprehensive staging workup, including lab and imaging studies ● Conducts an informed consent discussion with cultural humility and completely documents the discussion related to operative management ● Presents patient cases at an interdisciplinary care conference and discusses care options with other specialists (eg, medical oncology, radiation oncology, pathology, radiology) ● Identifies and applies high-quality current literature for the management of cutaneous and subcutaneous neoplasms 	<ul style="list-style-type: none"> ● Positions the patient to expose the operative field and all associated sites (eg, donor sites); marks out indicated margins based on lesion type ● Uses lymphoscintigraphy to plan an operative approach for SLNB ● Performs wide local excision and SLNB with minimal guidance; respects tissue planes to minimize trauma; anticipates next steps and logistical needs ● Independently and accurately orients the specimen for pathology ● Performs simple reconstruction or skin grafting with guidance ● Recognizes unexpected intraoperative findings (eg, presence of in-transit melanoma, lymphadenopathy, or atypical lipomas) but needs direction to modify the operative plan ● Demonstrates fairly smooth technical movements, hand coordination, and careful tissue handling ● Considers the location of important structures and preserves them during excision of neoplasms (eg, spinal accessory nerve) ● Collaborates with plastic surgery for reconstructive options and nuclear medicine for SLNB ● Coordinates with perioperative staff to ensure most necessary equipment is available and ready to use 	<ul style="list-style-type: none"> ● Recognizes and manages early postop complications such as seroma, hematoma, or infection; recognizes late findings like recurrent disease ● Develops a postencounter plan that includes patient care needs, outcome expectations, and follow-up but omits some elements when discussing expected outcomes and the overall anticipated treatment course ● Engages in shared decision-making with a patient/caregiver(s), integrating unique goals of care ● Assists in coordinating an interdisciplinary cancer care conference ● Uses evidence-based treatment guidelines to outline treatment options for malignant neoplasms, requiring guidance for complex presentations (eg, metastatic melanoma, unresectable neoplastic recurrences)



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<p>4</p> <p><u>Practice Ready</u></p> <p>Can manage more complex patient presentations and operations and take care of most cases</p> <p><u>Framework:</u></p> <p>The learner can treat all straightforward skin and subcutaneous neoplasms and has a strong understanding of surgical options and technique for less common scenarios.</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 presentations.</p>	<ul style="list-style-type: none">• Synthesizes all information to develop a plan for managing a patient with a complex cutaneous or subcutaneous neoplasm/condition (eg, localized or metastatic melanoma, Merkel cell carcinoma, large subcutaneous mass)• Anticipates when primary closure will not be feasible or high risk and develops a plan for closure (eg, local flap coverage, collaboration with other specialists)• Develops a plan and coordinates interdisciplinary care for a patient with a malignant cutaneous neoplasm• Performs or directs performance of the optimal biopsy technique for a suspicious skin lesion• Customizes communication based on individual patient characteristics and preferences across barriers and cultural differences in a complex situation; manages and de-escalates conflict with a difficult or hostile patient or caregiver• Conducts an informed consent discussion for a complex lesion excision or reconstruction with cultural humility; elicits patient preferences; documents risks and benefits individualized to the patient• Leads and coordinates an interdisciplinary care conference, facilitating professional care discussions with other specialists (eg, medical oncology, radiation oncology, pathology, radiology) and resolving conflict when needed• Critically appraises and applies evidence while incorporating patient preferences to develop a plan for a nuanced and complex	<ul style="list-style-type: none">• Positions the patient to expose the surgical field while minimizing risk of iatrogenic injury• Independently marks out indicated margins of excision for skin neoplasms• Performs wide local excision and SLNB in straightforward and complex lesions• Independently performs primary closure, simple reconstruction, and skin grafting• Recognizes when complex wound closure is required and prospectively coordinates with other specialists• Integrates unexpected intraoperative findings, including in-transit melanoma, lymphadenopathy not identified preoperatively, or atypical lipomas, and modifies the operative plan• Coordinates with perioperative staff in advance to ensure that all necessary equipment is available and ready for use	<ul style="list-style-type: none">• Recognizes and manages both early and late postop complications, such as seroma, hematoma, infection, and recurrences; biopsies a lesion suspicious for recurrence• Communicates a postencounter plan to a patient/caregiver(s) with cultural humility, including wound care, surveillance, and follow-up of malignant lesions per evidence-based treatment guidelines• Engages in postencounter shared decision-making with a patient/caregiver(s), integrating unique goals of care and treatment options (eg, metastatic melanoma, unresectable neoplastic recurrence)• Coordinates a treatment plan as outlined in an interdisciplinary cancer care conference• Critically appraises and applies evidence, adapting the plan based on a nuanced presentation



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	<p>cutaneous and subcutaneous neoplasm presentation</p> <ul style="list-style-type: none">• Collaborates with other health care providers to formulate a patient-centered operative plan for all common skin neoplasms		