

Melanoma: Guidelines of Care for the Management of Primary Cutaneous Melanoma (2019)

About the Guideline

- The guideline focuses on the care and management of pediatric, adolescent, and adult patients with clinical stages 0 to IIC primary cutaneous melanoma, including nail involvement. The guideline doesn't address melanoma of the mucous membranes or uveal melanoma.
- The guideline workgroup was composed of expert practitioners, including academic melanoma specialists in cutaneous, medical, and surgical oncology, dermatopathology, Mohs micrographic surgery (MMS) and cutaneous surgery, private practice practitioners, and a patient advocacy organization.
- The expert group followed evidence-based recommendations, and the literature was evaluated using the Strength of Recommendation Taxonomy (SORT) method developed by editors representing various journals.
- The literature was selected using a database and included all the articles from January 1, 2010, to April 30, 2017, that addressed the care and management of primary cutaneous melanoma. The selected literature was graded using a three-point scale based on the quality of the methodology.

Definition

- A primary cutaneous melanoma is any primary melanoma lesion, regardless of tumor thickness, without any signs of clinical or histologic involvement of local or metastatic invasion.
- One of the important prognostic factors for primary cutaneous melanoma is the dermal mitotic rate.
- Cutaneous melanoma is the most common malignancy during pregnancy.

Key Clinical Considerations

Become familiar with the recommendations and best-practice statements provided in this guideline, especially if you work in an acute care setting.

Biopsy

- Biopsy is required for crucial diagnosis confirmation of cancer. The biopsy can be either incisional (part of lesion removal) or excisional (removal of entire lesion).
- A narrow excisional biopsy is recommended for any clinically suspicious lesion. The biopsy should include the entire depth of the tissue with clinically negative margins.
- The preferred biopsy method is elliptical or punch excision with sutures or shave removal of a certain extent of suspected lesion, including the deep tissue.
- A repeat biopsy should be performed if the specimen is inadequate for diagnosis confirmation.
- If a nail lesion is suspected for primary cutaneous melanoma, the nail plate should be removed, and the subungual lesions must be inspected. In such cases as this, an excisional biopsy is recommended.
- If the patient presents with a facial or acral lesion, an incisional biopsy may be adequate.

Essential Information for the Pathologist

- The pathologist should receive a biopsy specimen and essential clinical and histological information, including:
 - Age
 - Gender
 - Anatomic location of the lesion
 - Type of biopsy or surgical procedure performed
 - Size of the lesion(s)
 - Clinical impression and differential diagnosis
 - Tumor (Breslow) thickness
 - Ulceration
 - Dermal mitotic rate
 - Peripheral and deep margin status
 - Microsatellitosis

Initial Work-up After Diagnosis Confirmation

- Perform a thorough history and physical examination with a focused review of the systems. The practitioner should particularly note unanticipated weight loss and new-onset headaches.
- Perform a total body skin assessment, including the palpation of regional and distant lymph nodes.
- Obtain the following in patients with signs and symptoms of metastasis:
 - Chest X-ray
 - Baseline laboratory tests:
 - Lactate dehydrogenase (LDH) level
 - Liver function tests (LFTs)
 - Chemistry panel
 - Complete blood count (CBC)
 - Further imaging studies may be needed if clinically indicated.
- Advise patient to schedule regular consultation and follow-up with an oncologist or a melanoma specialist if at risk for relapse due to tumor state, thickness, ulceration, status of sentinel lymph node (SNL), or any combination of these factors.
- Educate patient to perform skin self-examination to detect any regional lymph node enlargement.

Management

Surgical Intervention

- Complete removal of melanoma of any thickness should occur, including histologically negative.
- Clinical measurement of surgical margins for invasive melanoma is 1 cm to no more than 2 cm around the primary tumor.
- For melanoma in situ, a wide excision with a 0.5 to 1.0-cm margin is recommended.
- Due to broad subclinical extension, lentigo maligna histologic subtype may require margins of more than 0.5 cm to achieve histologically negative margins.

Nonsurgical Intervention

- Before considering nonsurgical interventions, discuss the risks and benefits with the patient, including the chance of missing underlying invasive primary lesions.

- Topical imiquimod may be used as an alternative treatment and as an adjuvant therapy after surgical excision. The cost of therapy and risk of severe inflammatory reaction should be considered.
- When surgery is not a realistic option for lentigo maligna, radiation therapy (with or without prior excision of nodular melanoma) can be considered.
- Medications available to treat advanced or unresectable cutaneous melanoma include those that target the mitogen-activated protein kinase (MAPK) pathway (B-Raf proto-oncogene, serine-threonine kinase gene [BRAF] inhibitors; and MAPK inhibitors) and those that result in immune checkpoint blockade.
 - Appropriate management includes recognizing common and rare adverse effects of these medications.
- Oncolytic virus immunotherapy is a new approach to treating metastatic disease.

Sentinel Lymph Node Biopsy (SLNB)

- Before conducting an SLNB, the practitioner should consider:
 - Comorbidities
 - Patient's preferences
- The most important prognostic factor for predicting survival of patients with primary cutaneous melanoma is SLN status.
- For selected patients with primary cutaneous melanoma, SLNB is the most accurate method of staging and predictor of survival.
- SLNB is recommended for patients with a tumor thickness of more than 1 mm.
- SLNB helps identify the presence or absence of metastatic cells in the entire lymph node basin.
- For patients with stage T1b cutaneous melanoma and a tumor thickness of less than 0.8 mm with ulceration or a tumor thickness of 0.8 mm to 1 mm, the practitioner should discuss performing an SLNB.
- If a lesion is less than or equal to 0.8 mm without ulceration, SLNB is not recommended.

Recurrence

- Local recurrence consists of two types:
 - Persistent disease is recurrence defined by the presence of an in-situ growth phase, and/or radial growth phase, or both.
 - Satellite metastasis is clinically detectable by palpable masses at the scar of the primary and intralymphatic involvement.

Surveillance

- Follow-up schedule varies with the risk of disease recurrence and of new primary melanoma. The primary practitioner and oncologist should recommend a follow-up schedule.
- Laboratory tests aren't recommended for patients with asymptomatic, newly diagnosed, localized cutaneous melanoma.
- Patients should be educated on performing self-skin examinations and reporting lymph node swelling that may indicate recurrence or a new primary melanoma.
- Genetic counseling is recommended for patients who have:
 - Family history of invasive cutaneous melanoma or pancreatic cancer
 - Multiple (three or more sites) primary invasive cutaneous melanoma
 - Early age at diagnosis (age 45 or younger)

- One or more melanocytic BRCA1-associated protein 1 (BAP1)-mutated atypical intradermal tumors and a family history of mesothelioma, meningioma, uveal melanoma, or a combination of these
- Two or more melanocytic BAP1-mutated atypical intradermal tumors

Reference:

Swetter, S. M., Tsao, H., Bichakjian, C. K., Curiel-Lewandrowski, C., Elder, D. E., Gershenwald, J. E., Guild, V., Grant-Kels, J. M., Halpern, A. C., Johnson, T. M., Sober, A. J., Thompson, J. A., Wisco, O. J., Wyatt, S., Hu, S., & Lamina, T. (2019). Guidelines of care for the management of primary cutaneous melanoma. *Journal of the American Academy of Dermatology*, 80(1), 208–250. <https://doi.org/10.1016/j.jaad.2018.08.055>