Practice Management Center

Educational Tool on When Pathology Consultation or Paraffin Sections are Compatible with Mohs Micrographic Surgery

This tool is intended to provide guidance on situations in which it may be appropriate to report when pathology consultation and/or paraffin sections are obtained during Mohs Micrographic surgery. This document is provided in support of the American Academy of Dermatology position statement *When Pathology Consultation or Paraffin Sections are Compatible with Mohs Surgery.*

Meeting Criteria for Mohs Micrographic Surgery (MMS)

- MMS is a technique for the removal of complex or ill-defined skin cancer with histologic examination of 100% of the surgical margins. It requires a single physician to act in two integrated but separate and distinct capacities: surgeon and pathologist. If either of these responsibilities is delegated to another physician who reports the services separately, the CPT codes for MMS should not be reported.
- Under MMS, the Mohs surgeon removes the tumor tissue, maps and may divide the tumor specimen into pieces and each specimen or piece is embedded into an individual tissue block for histopathologic examination.
- While this is typically done with frozen sections, it can be done on paraffin sections in selected cases. The Mohs surgeon then interprets the frozen (or paraffin) section for each piece and indicates in the medical record where tumor remains, if any.

Services provided must be medically necessary, appropriately documented and billed in accordance with current CPT guidelines.

When Pathology Consultations or Paraffin Sections are Compatible with Mohs Micrographic Surgery

The examples include, but are not limited to, the following.

(1) **Different Tissue Site than MMS**
The AMA *CPT Assistant,* February 2014, page 10 states the following: “there are legitimate instances in which tissue separate from the tissue examined during the Mohs surgery is submitted for subsequent formalin-fixed processing and histopathologic examination. In these instances, the submitted specimen may originate from the same operative site or from a different operative site but is not the same tissue that was

processed during the Mohs surgery." In such a situation, the appropriate CPT codes for examination of a surgical pathology specimen(s), describing the pathology performed on the separate tissue, may be reported in addition to the Mohs surgery codes.

(1) **Further tissue processing is required** to assess features of an aggressive, deep or histologically unusual tumor;
In complex Mohs cases, tumors may be unusually aggressive, deep, or otherwise histologically unusual. In these cases, paraffin section processing and pathologic analysis may be required for evaluation of these tumors' unusual histologic features:

- Unusually aggressive tumors would include poorly differentiated tumors.
- Deep tumors include tumors penetrating into bone and requiring processing of the same, which cannot be done with frozen sections.
- Special stains with paraffin sections may be required for confirmation of clear margins for rare and uncommon nonmelanoma tumors that are treated with Mohs surgery, such as, but not limited to, extramammary Paget's disease (CK7), Merkel cell carcinoma (CK20), or dermatofibrosarcoma protuberans (CD34).
- Histologically unusual tumors or those with a diffuse inflammatory infiltrate that makes interpretation of frozen sections unreliable.
- Interdisciplinary management may be needed to improve cure rate for certain tumors with a potentially high metastatic rate or high likelihood of local recurrence. For instance, for dermatofibrosarcoma protuberans, an algorithm has been reported that combines Mohs and paraffin section evaluation.[1]

(2) **Confirmation of a Diagnosis is Required** Paraffin section evaluation and/or pathologic consultation is used to confirm a diagnosis other than what was found on a prior pathology report, upon which Mohs surgery was done. Prior to the initiation of Mohs surgery, a biopsy specimen is required to establish diagnosis.

- The original biopsy specimen may not be representative of the entire tumor. Thus, when removing a tumor, a more representative section may occur for which second opinion consultation is required for diagnostic clarification. Obtaining such a consultation does not negate the Mohs procedure.
- Collision lesions can also occur. In a typical collision lesion, two unrelated tumors may be physically proximal or even overlapping. The prior biopsy specimen leading to initiation of Mohs may have led to the diagnosis of one of these tumors, but without detection of the adjacent tumor. For instance, a basal cell carcinoma treated by Mohs surgery may be proximal to an amelanotic nodular melanoma, which may require different treatment. When suspecting a collision lesion, sending paraffin sections for pathologic examination is appropriate.

(3) **Staging or Grading is Required** Further tissue analysis is necessary to provide further prognostic information or to complete the staging of a tumor so that the need for additional therapy, such as radiation or chemotherapy, can be determined. Mohs surgery is a marginal examination, not a staging procedure. Findings on Mohs tissue often provide additional prognostic information for patient counseling or to guide treatment options. For instance, during Mohs surgery, it may become apparent that perineural, vascular, or lymphatic invasion is present. Such invasion confers increased risk of metastasis and may in turn suggest the need for additional radiation therapy, lymph node biopsy or dissection, or enrollment in a systemic treatment such as immunotherapy or chemotherapy protocol. For the Mohs procedure to be valid, the physician must remove the tumor tissue and examine it pathologically by frozen section to confirm margin negativity. Additional confirmation of tumor characteristics required for correct staging or grading may be appropriately obtained by a dermatopathology consultation or by paraffin sections sent for pathologic examination without invalidating the Mohs procedure.

(4) **Second Opinion Consultation is Required during Treatment of Melanoma** Unusual findings during frozen section evaluation, or during other portions of the Mohs case, lead the physician to conclude that a second pathologic opinion is necessary.
When melanoma is treated by Mohs, a second opinion consultation may be required. This reflects the requisite high standard of care for melanoma treatment given the higher associated risks. As recommended by NCCN guidelines, the central melanoma specimen may be sent for paraffin serial sections to assess depth of invasion, or a slide(s) on a given stage may be sent for pathologic consultation. Additionally, when Mohs surgery is used as a treatment for melanoma or melanoma in situ, after frozen section evaluation of surgical margins has been completed with Mohs surgery, permanent section pathologic evaluation of an additional margin of tissue to confirm margin control may be considered without negating the Mohs procedure. Kinonen & Reddy (2010; citing Dawn, Dawn & Miller 2007) recommend: “A final margin can then be taken from around the tumor and sent for paraffin sections to confirm the initial frozen section margin assessment.”[2]

(5) **Confirmation of Diagnosis by Paraffin Section** A biopsy specimen of tumor not previously biopsied is obtained and assessed by frozen section immediately before commencement of Mohs; the pathologic diagnosis is then confirmed by paraffin section.

(6) **When Special Stains Are Required** Special stains, which are not performed by the Mohs lab, are required for optimal marginal examination or diagnostic accuracy.

A Second Opinion is Required

The decision to send paraffin sections for pathologic examination should be guided by:

- the acceptable standard of care;
- good medical practice;
- the need to avoid patient harm; and
- the need to ensure patient benefit.

Criteria for Mohs Surgery Are Not Met

When one or more of the tasks that must be performed by the operating surgeon are delegated to another physician, the criteria for Mohs surgery are not met. As examples of sending paraffin sections for pathological consultation that do not meet the criteria for Mohs surgery:

(1) When all excised specimens during the course of Mohs are sent to a pathologist for initial interpretation by either frozen sections or paraffin sections, then Mohs is no longer being performed. Instead, the physician removing the tissue should characterize that process as an excision and document it as such.

(2) When a separate physician, such as a pathologist, reads the slides made from tissue removed by the Mohs surgeon during a particular stage of Mohs surgery, and the Mohs surgeon does not first interpret frozen sections, this will constitute “delegation of responsibility” and as such, makes it incompatible with Mohs surgery. This differs from permissible scenarios previously described.

(3) Routine primary interpretation by another physician (e.g. a pathologist) of histopathlogic features of a tumor being treated with Mohs is not compatible with Mohs surgery. In general, pathologic consultation should occur in a rare number of cases.

When Frozen Section Interpretation is Not Sufficient

It is generally accepted that frozen sections are, in some instances, don’t provide sufficient cellular and cytological details to allow optimal diagnostic and treatment interpretation compared to paraffin sections. In 1991, the College of American Pathologists' Q-study probe found that for frozen sections, there existed a 4.2% deferral of diagnosis rate and discordance with paraffin section diagnosis of 1.7% (Novis, Gebhardt & Zarbo 1996, as cited in Montag 2010).[3] This “deferral” refers to instances in which frozen sections are of insufficient quality for diagnosis, and in which tissue is sent for paraffin section and pathologic analysis. In these instances, it is undeniably the standard of care to obtain pathologic consultation. If, despite proper processing, frozen

sections cannot be interpreted, recuts and restaining, or other adjustments in the frozen section laboratory, may be sufficient to remedy this problem. If such further frozen section processing is impractical or insufficient, paraffin sections may appropriately be sent for second opinion consultation.

Coding and Documentation Guidelines

The AMA *CPT Assistant,* February 2014, page 10 states "it is inappropriate to report both Mohs Micrographic Surgery codes 17311-17315 and Surgical Pathology codes 88302-88309 on the same tissue used for margin evaluation during Mohs surgery. However, there are legitimate instances in which tissue separate from the tissue examined during the Mohs surgery is submitted for subsequent formalin-fixed processing and histopathologic examination. In these instances, the submitted specimen may originate from the same operative site or from a different operative site but is not the same tissue that was processed during the Mohs surgery. In such a situation, codes 88302-88309, describing the pathology performed on the separate tissue, may be reported in addition to the Mohs surgery codes (17311-17315)."

Documentation in the medical record should include the rationale for evaluation with formalin fixed sections. Beware of routinely sending debulked tissue for histopathology, as repeated reporting of the surgical pathology codes in association with Mohs surgery creates a pattern that may raise concerns by payers and subject the Mohs surgeon to payment denials and/or audits which may lead to payer demands for recoupment of payment for current and prior Mohs surgeries.

References

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2. Dawn ME, Dawn AG, Miller SJ (2007). Mohs surgery for the treatment of melanoma in situ: a review. *Dermatol Surg*. 2007; 33:395-402. Cited in Kinonen & Reddy 2010: Kinonen C, Reddy VB (2010). The Skin. In J Taxy, A Husain, & A Montag (Eds.) *Biopsy Interpretation: The Frozen Section.* (p. 270-302) New York: Wolters Kluwer.
3. Novis DA, Gebhardt GN, Zarbo RJ (1996). College of American Pathologists, Interinstitutional comparisons of frozen section consultation in small hospitals: a College of American Pathologists Q probes study of 18,532 frozen section consultation diagnoses in 233 small hospitals. *Arch Pathol Lab Med.* 1996; 120(12): 1087-1093. Cited in Montag 2010.
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