

Melanoma

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JM is a 81 year old Caucasian male who presented to my clinic in November 2020 with biopsy proven lentigo maligna melanoma of the posterior scalp. The patient had a past medical history significant for multiple squamous cell and basal cell carcinomas of the face and scalp which had undergone resection. In addition, he had a history of right leg DVT and pulmonary embolism for which he was on Xarelto.

The patient was noted to have this new lesion on his scalp after visiting his eye doctor in early November. Despite, having regular skin checks the most recent being in October 2020, this particular lesion had been missed or was not present at the time. The patient went to dermatology where a shave biopsy was performed of the lesion which came back as a lentigo maligna melanoma with a positive deep margin at .32 mm. The patient was then referred to me for evaluation and management.

On presentation to my clinic, the patient had a 1.5 cm lesion on the posterior parietal scalp just beyond the vertex. The lesion had irregular borders, was of variable pigmentation, and was not raised. The prior biopsy site was scabbed over. The patient did not have any palpable lymph nodes in the pre or retro auricular and cervical regions. The decision was made at that time that given a deep positive margin on his original biopsy I would perform an excisional biopsy of the lesion to assess the depth of invasion. We discuss that that I would take a margin of normal tissue with the lesion but that I would not close the defect as there was a good possibility the lesion was deeper and would warrant definitive surgical margins. I also checked with the patients PCP to confirm that he could be off of his Xarelto for 48 hours prior to the procedure.

At the beginning of December 2020, the patient was taken to the procedure room. Using sterile technique, the lesion was excised with approximately 1 cm margins or grossly normal tissue. The incision was taken down to the level of the galea and the specimen was removed sharply. Hemostasis was achieved and the wound bed was irrigated with sterile saline. The wound was then closed with a purse-string suture bring the total area of the open wound to approximately 1.5 cm. A bolster dressing was then applied to the open area. The patient tolerated the procedure and there were no untoward events immediately after the procedure.

However, the next day the patient developed pain in his right leg despite already restarting his Xarelto. He was taken to Syracuse where imaging studies were performed demonstrating an acute DVT which was surgically managed. The patient was subsequently discharged.

The pathology returned several days later which demonstrated a malignant melanoma with a Breslow depth of invasion of 1.3 mm. There was clear deep margins but positive peripheral margins. There was no ulceration, mitotic rate was 1/mm squared, Clark level IV, and no lymphovascular invasion. Given these findings the patient's stage was pT2aNXMX. At this point I had the patient return to the office for a discussion. I told the patient that he would need to be adequately staged. With a depth of invasion >1 mm he would need a sentinel lymph node biopsy (SLNB). He would also need re-excision with margins of at least 1-2 cm. I suggested the patient go to Rochester for evaluation as this is an academic institution with a tumor board and strong multidisciplinary approach to melanomas. Unfortunately, the patient did not want to leave the New Hartford area. Therefore, the following plan was discussed. We would find a surgical oncologist in the area that would be able to perform a SLNB and possibly perform a further resection of the lesion. If the surgeon was not comfortable with resection I would perform the resection and close the defect. Given his history of DVT and most likely the need to remain on his blood thinner during surgery, a less aggressive reconstructive option was offered to the patient. This included skin grafting the scalp after resection. This would allow for 1) immediate coverage of the wound 2) decrease operative time 3) allow for further resection if needed without violating flap options. If he had positive SLNs he would most likely have to go for a cervical lymph node dissection which would be performed delayed by a surgical oncologist. Finally positive lymph nodes would warrant a PET/CT scan and LFTs to rule out distant metastasis. We would have him meet with an oncologist as well who would be able to assist in adjuvant therapies if warranted.

Discussion:

This case highlights several important issues.

1. Need for thorough skin checks (ideally by multiple specialists). This patient had been getting surveillance screens by a physician extender for the past 6 months with the most recent exam being early October. Unfortunately, this lesion was either not present at that time or was missed. He was seen several weeks later by his eye doctor who noticed the lesion. For this particular patient, given the number of prior cutaneous malignancies he had it may have been beneficial to have shorter follow up intervals by several specialists either in different departments or in the same department. While not infallible there would be an increased chance of catching a malignant lesion.
2. Need for full thickness tissue biopsy when melanoma is expected. This patient had undergone a shave biopsy and had a diagnosis of melanoma. The lesion was suspicious for melanoma as it was asymmetrical, had irregular borders, was > 6mm and had variable color. While studies exist that suggest a shave biopsy may be adequate for melanoma staging, these biopsies need to be performed

deep enough to obtain a clear deep margin so an adequate Breslow depth can be determined. As seen in this case the depth was not adequate and an excisional biopsy was performed. For small lesions excisional biopsy remains the gold standard. For larger lesions an incision biopsy would be beneficial as long as a full thickness piece of tissue could be obtained.

3. Judicious discontinuation of blood thinners. While it is possible to perform procedures while a patient is on blood thinners. I thought it prudent to discontinue the blood thinners for 48 hours as I was doing a scalp resection. Given the vascularity of the scalp and that I was taking the specimen down to the level of the galea, the likelihood of bleeding was high. In addition, the plan was to keep the patient's scalp wound open and packed, therefore creating a friable wound bed prone to bleeding. However, despite this benefit, the risk of stopping the blood thinner was what actually happened. The patient developed a DVT requiring surgical intervention. Moving forward the patient will most likely remain on blood thinners for his future surgeries. Blood will be made available during the operations and good hemostasis will need to be achieved. Also we will need to limit his operative time as well as perform the least aggressive reconstruction.
4. Need for a cutaneous tumor board. This patient did not want to go to an academic center for workup and management of his melanoma. He was animate that he stay in New Hartford for his treatment. We do have the expertise between Slocum Dickson, St. Luke's and St Elizabeth's to provide for these patients. However, in order for there to be coordination between providers there needs to be discussion about these patients as a group. Tumor board conferences are used by oncologic specialists to review patient cases, exchange knowledge, and discuss options for cancer management. These meetings are a cornerstone of treatment at leading cancer centers and are required for accreditation by certain groups. I would propose that there be monthly or weekly meetings among the various disciplines- plastic surgery, dermatology, oncology, and eventually general surgery, to discuss patient cases. This can also be extrapolated to breast cancer as we do have a Breast Center.