Giant Cheek Melanoma: A Case Report and Review of the Literature

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Abstract

The rare cases of primary giant melanoma described in literature have been reported of the scalp, arm, abdomen and back and the majority of the cases presented with clinically palpable regional lymphadenopathy or extensive metastatic disease at the time of diagnosis. We presented a case of a 74-year-old woman with a giant cheek melanoma of 10.1 cm × 8.3 cm that underwent to excisional surgery of the tumor that left behind a large cheek wound defect. We used a dermal regeneration template followed after three weeks by Split-Thickness-Skin-Graft (STSG) to cover the wound. A wide excision appeared to be resolutive to the histological analysis. No metastasis has been described by total-body computed tomography; no regional lymphadenopathy resulted by ultrasound examination of the neck.

Keywords: Giant melanoma; Face melanoma; Cheek

Introduction

Giant primary melanoma is defined as lesions at least 10 cm in diameter or 48 mm in thickness [1,2]. Isolated case of a giant melanoma has been documented of various anatomic sites, including scalp [3], arm [4,5], abdomen [6], back [2,7], and eyelid [8] and the diameter of primary melanoma has been reported from 10 cm up to up to 25 cm with Breslow’s depth of 0.45 mm up to 100 mm [3,5,9].

Despite the extremely large size of the melanomas is it interesting that in several case reports palpable lymph nodes were found on physical examination but no evidence of distant metastases was noted on imaging studies. Regardless of size, melanomas that are polypoid or exophytic are associated with increased malignant potential and overall, worse prognosis; these tumors also demonstrated a nodular growth pattern and often are thicker and ulcerated at the time of presentation. Despite negative prognostic factors in all the reviewed cases. Giant melanomas were reported to be only locally aggressive as in our case reports.

Case Presentation

The patient is a 74-year-old woman, in previous good health, who reported having a hyperpigmented area on her left cheek (Figure 1). Objective structured clinical examination revealed a brown area with two small nodules in the center of the lesion and punch biopsy was performed in another department on the nodular lesion with histological confirmation of malignant lentigo, with infiltration of the papillary dermis. No palpable regional lymph node was identified and preoperative ultrasound showed no signs of lymphadenopathy in the neck. Margin assessment was performed by confocal microscopy revealed a 10.1 cm × 8.3 cm area and patient underwent wide excision with clear margins. Dermal regeneration template dressing was applied to the cheek defect and stapled (Figure 2). After three weeks donor skin graft was taken from back and grafted on top of the dermal regeneration template and a light compressive dressing was then applied on top of the grafted area (Figure 3). A follow-up visit showed 100% graft take and a well-healing wound (Figure 4). Histological examination of the surgical excision revealed an asymmetric nodular proliferation and atypical and epithelioid melanocytes positive for Melan-A and HMB-45 immunostains. Breslow’s depth was 1.9 mm, Clark level was IV, regression was positive in some focal areas, and there was no ulceration signs. All the excisional margins have been histologically tested negative for tumor infiltration by direct microscopic observation. There was no signs of vascular or perineural invasion.

According to the AJCC TNM staging system, the patient was classified as stage IB disease (pT2a, N0, M0). Post-operative Total-body computed tomography scan confirmed no evidence for
Cases of giant primary melanoma, defined as lesions at least 10 cm in diameter or 48 mm in thickness [1,2] are often associated with extensive metastatic disease [4,7]. More than the size of the primary tumor, ulceration and thickness are the most important prognostic factors for nodal basin involvement or distant metastasis [10,11].

As in our case, other authors highlighted that despite the size, the depth involvement of tumor and presence of nodular growth, in some cases of giant melanomas, the presence of many negative prognostic factors did not directly correlate to objective distant aggressiveness as usually happened for smaller conventional nodular melanomas [1,12].

<table>
<thead>
<tr>
<th>Case</th>
<th>Sex and Age (years)</th>
<th>Localization</th>
<th>Size (cm)</th>
<th>Breslow thickness (mm)</th>
<th>Nodal diffusion</th>
<th>Metastatic disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grisham [13]</td>
<td>F 45</td>
<td>Back</td>
<td>13 cm</td>
<td>55</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>De giorgi [6]</td>
<td>F 45</td>
<td>Abdomen</td>
<td>16 cm</td>
<td>0.45</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Kim [16]</td>
<td>F 56</td>
<td>Thumb</td>
<td>7 × 4 × 3.5</td>
<td>&gt;4</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Di Meo [15]</td>
<td>F 60</td>
<td>Abdomen</td>
<td>18 × 15 × 6</td>
<td>40</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Harting [9]</td>
<td>M 29</td>
<td>Back</td>
<td>22 × 25 × 7</td>
<td>54</td>
<td>Yes</td>
<td>NA</td>
</tr>
<tr>
<td>Pai [8]</td>
<td>M 53</td>
<td>Eyelid</td>
<td>5 × 4.5 × 4</td>
<td>45</td>
<td>Yes</td>
<td>NA</td>
</tr>
<tr>
<td>Panajotovic [3]</td>
<td>M 57</td>
<td>Scalp</td>
<td>12 × 10</td>
<td>100</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Chong [14] (Case 1)</td>
<td>M 60</td>
<td>Thigh</td>
<td>6 × 8.2</td>
<td>60</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Chong [14] (Case 2)</td>
<td>M 60</td>
<td>Back</td>
<td>8 × 7</td>
<td>24</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Pizzonia [12]</td>
<td>F 90</td>
<td>Cheek</td>
<td>13.2 × 12</td>
<td>90</td>
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<td>No</td>
</tr>
<tr>
<td>Our case</td>
<td>F 74</td>
<td>Cheek</td>
<td>10.1 × 8.3</td>
<td>1.9</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 1: Summary data of published reports referred to patients with primary giant cutaneous melanomas in which the macroscopic lymph node status was reported and patients did not have metastatic disease at the time of diagnosis.
A literature review has shown only 8 patients with primary melanoma appearing as a giant cutaneous tumor in which the macroscopic lymph node status was reported and patients did not have metastatic disease at the time of diagnosis (Table 1). In three cases described, the presence of distant metastases is unknown or uncertain [6,8,9]. There does not appear to be a sex prevalence and the most common location is the back [9,13,14]. The diameters of the tumors have ranged between 4 cm and 25 cm and the Breslow thickness has varied from 0.45 mm to 100 mm, with a mean thickness of 43 mm, 12 mm (average value obtained from 11 reported patients). Despite the presence of negative prognostic factors such as the big size, the clinical presence of nodules in the lesion, in our case no lymph node or distant metastases occurred. Some authors suggest a biological pattern of local aggression in some types of giant primary melanoma with poor lymphohematogenous dissemination [12,14,15], but further studies are needed to highlight the correlation.

References