Baseline Compliance with Commission on Cancer Standard 5.5: Wide Local Excision for Primary Cutaneous Melanoma

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BACKGROUND

- The ACS Commission on Cancer (CoC) Cancer Surgery Standards Program (CSSP) was created in 2020 as a quality improvement endeavor.
- Operative Standards for Cancer Surgery have been published for melanoma.
- The CoC Standard 5.5 for melanoma focuses on curative intent wide local excision (WLE) of primary cutaneous melanoma and outlines:

  1. All WLEs with curative intent must:
     - Achieve standardized excision margins ∋ based on Breslow depth
     - Include the proper depth of excision ∋
       - In situ disease: skin + superficial subcutaneous fat
       - Invasive melanoma: skin + subcutaneous tissue down to fascia
     - Width was classified from the STORE codes as:
       - Gross excision (GE)
       - >1cm margin
       - >1cm to 2cm
       - >2cm
     - Based on T category, margin compliance with Standard 5.5 was defined as follows:
       - Tis: GE and Mohs surgery
       - T1: GE, Mohs surgery, and WLE with >1cm margin
       - T2-T4: GE, Mohs surgery, WLE both with >1cm margins and WLE with margins >1cm to 2cm
       - Residual disease at a margin was considered undertreated and non-compliant

  2. All operative reports include the required minimum elements in synoptic format:
     - Curative intent
     - Depth of original lesion
     - Clinical margin used to excise
     - Confirmation of depth of dissection

METHODS

- National Cancer Database data from 2004 to 2020 was used to identify all Tis-T4, M0 melanoma patients undergoing operation on the primary melanoma
- Margin width was classified from the STORE codes as:
  - Gross excision (GE)
  - >1cm margin
  - >1cm to 2cm
  - >2cm
- Based on T category, margin compliance with Standard 5.5 was defined as follows:
  - Tis: GE and Mohs surgery
  - T1: GE, Mohs surgery, and WLE with >1cm margin
  - T2-T4: GE, Mohs surgery, WLE both with >1cm margins and WLE with margins >1cm to 2cm
  - Residual disease at a margin was considered undertreated and non-compliant

OBJECTIVE

Evaluate baseline compliance with the CoC Standard 5.5

RESULTS

<table>
<thead>
<tr>
<th>Clinical T Category</th>
<th>Total N=398,583</th>
<th>Gross Excision N=165,138</th>
<th>Any Mohs Excision N=25,756</th>
<th>&gt;1cm margin N=136,745</th>
<th>&gt;1cm to 2cm margin N=16,164</th>
<th>&gt;2cm margin N=22,780</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tis</td>
<td>111,952 (28)</td>
<td>52,538 (47)</td>
<td>16,610 (15)</td>
<td>34,518 (31)</td>
<td>4,689 (4)</td>
<td>3,597 (3)</td>
</tr>
<tr>
<td>T1</td>
<td>163,676 (41)</td>
<td>73,622 (45)</td>
<td>7,251 (4)</td>
<td>60,090 (37)</td>
<td>15,049 (9)</td>
<td>7,664 (5)</td>
</tr>
<tr>
<td>T2</td>
<td>64,997 (16)</td>
<td>22,215 (34)</td>
<td>1,067 (2)</td>
<td>22,357 (34)</td>
<td>14,197 (22)</td>
<td>5,161 (8)</td>
</tr>
<tr>
<td>T3</td>
<td>35,751 (9)</td>
<td>10,687 (30)</td>
<td>509 (1)</td>
<td>11,968 (34)</td>
<td>8,953 (25)</td>
<td>3,634 (10)</td>
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<tr>
<td>T4</td>
<td>22,207 (6)</td>
<td>6,076 (27)</td>
<td>319 (1)</td>
<td>7,812 (35)</td>
<td>5,276 (24)</td>
<td>2,724 (12)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Excision type (%)</th>
<th>Total N=398,583</th>
<th>Gross Excision N=165,138</th>
<th>Any Mohs Excision N=25,756</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;2cm margin</td>
<td>3,597 (3)</td>
<td>7,664 (5)</td>
<td>7,664 (5)</td>
</tr>
<tr>
<td>&gt;1cm to 2cm margin</td>
<td>5,276 (24)</td>
<td>2,724 (12)</td>
<td>2,724 (12)</td>
</tr>
<tr>
<td>&gt;1cm margin</td>
<td>5,161 (8)</td>
<td>7,664 (5)</td>
<td>7,664 (5)</td>
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<tr>
<td>Compliance (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under treated</td>
<td>1,978 (2)</td>
<td>7,664 (5)</td>
<td>7,664 (5)</td>
</tr>
<tr>
<td>Over treated</td>
<td>4,212 (38)</td>
<td>7,664 (5)</td>
<td>7,664 (5)</td>
</tr>
</tbody>
</table>

CONCLUSIONS

- Estimated compliance for radial margin component of Standard 5.5 was 79% but cannot be accurately determined from current STORE codes
- An update of NCDB STORE codes to capture guideline-aligned, surgeon-specified in vivo WLE radial margins and WLE depth would permit auditing and QI measures to accurately assess and monitor CoC-accredited institutional compliance with Standard 5.5 to improve patient outcomes

REFERENCES