Characterizing the Rates and Causes of Spinal Cord Compression in Patients with Known Spinal Metastases in an Underserved Population

Poster #1714

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Disclosures

- Nothing to disclose
Introduction

• Spinal cord compression secondary to metastatic disease can cause irreversible spinal cord damage and neurological deficits.
• Preventing metastatic spinal cord compression (MSCC) in patients with known spinal metastases (SM) can drastically improve their quality of life and long-term outcomes.
Methods

• Neurosurgical records from Montefiore reviewed for patients with known spinal metastases
• Charts reviewed to determine:
  – How many patients presented with acute focal neurological deficits
  – How many patients with acute deficits had prior imaging demonstrating spine metastases that eventually caused cord compression
• Causes of delayed treatment for known spine mets were characterized
Results – Study Flow

118 patients with spinal metastases on imaging

24 patients presenting to hospital with new focal motor and/or sensory deficits secondary to spinal metastases

8 patients with imaging of spine metastases prior to onset of neurological symptoms (Mean 107 days; Median 66 days)

94 patients without new focal neurological deficits secondary to spinal metastases

16 patients without imaging demonstrating spinal metastases prior to onset of neurological symptoms
Results – Delays in Treatment

• 8 patients (6.8%) found to have known spinal metastases prior to developing cord compression
• Mean delay 107 days; Median delay 66 days
## Results – Causes of Delayed Treatment

<table>
<thead>
<tr>
<th>Causes</th>
<th>Count (% of patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lost to follow-up</td>
<td>3 (37.5%)</td>
</tr>
<tr>
<td>Social Barriers</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Misdiagnosis</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Failed radiation therapy</td>
<td>4 (50%)</td>
</tr>
</tbody>
</table>
Conclusions

- Patients with proven spine metastases may encounter barriers to care that increase their risk of developing cord compression.
- Further evaluation of and changes to current care pathways for patients with spine metastases are required to optimize their care.