PAINFUL COMPLICATIONS AFTER COSMETIC SURGERY: MANAGEMENT OF PERIPHERAL NERVE INJURY

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Introduction

- Demand for cosmetic surgery continues to rise each year in the United States of America
- There is a relative lack of peer-reviewed literature describing the accurate diagnosis and management of iatrogenic nerve injuries following cosmetic procedures.

Methods

<table>
<thead>
<tr>
<th>Cosmetic Procedure</th>
<th>Most Commonly Injured Nerve(s)</th>
<th>Most Common Site for Implantation of Proximal Cut End of Injured Nerve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdominoplasty</td>
<td>Iliohypogastric, Ilioginguinal</td>
<td>Pre-peritoneal space</td>
</tr>
<tr>
<td>Rhinoplasty</td>
<td>Superior Labial</td>
<td>Orbit</td>
</tr>
<tr>
<td>Breast Reduction</td>
<td>Iliohypogastric, Ilioginguinal</td>
<td>Triceps Muscle</td>
</tr>
<tr>
<td>Rhinoplasty</td>
<td>Greater Auricular</td>
<td>Adjacent Intercostal M.</td>
</tr>
<tr>
<td></td>
<td>Auricular-temporal</td>
<td>Latissimus Dorsi, Semitor M.</td>
</tr>
</tbody>
</table>

Results

- When pain consistent with a neuroma does occur, it can be managed by the algorithm and techniques presented.
- If nerve injury is observed acutely, then repair primarily, if feasible, or implant nerve is advised.

Algorithmic Approach to Suspected Neuroma

- **Abdominoplasty**
  - If pain persists, then proceed with focused physical examination.
  - If pain is much greater than expected raising suspicion for peripheral nerve injury (PNI)?

- **Rhytidectomy**
  - Positive Tinel’s Sign + Pain relief of at least 5 points on the Visual Analog Pain Score after a targeted nerve block?
  - Yes: Candidate for surgery (Neurectomy with neurolysis and implantation into nearby muscle).
  - No: Re-evaluate pain etiology and management strategy.

Conclusions

- Pain is a potential complication of cosmetic surgery that can negatively affect quality of life outcomes even in light of acceptable aesthetic outcomes.
- When pain consistent with a neuroma does occur, it can be managed by the algorithm and techniques presented.
- If nerve injury is observed acutely, then repair primarily, if feasible, or implant nerve is advised.

References


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