Persistent Idiopathic Facial Pain & Painful Traumatic Trigeminal Neuropathy
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No Disclosures

Roadmap: PIFP and PTTN
- Individual definitions and characteristics
- Management
- Are PIFP and PTTN related?
- Thoughts on pathophysiology

Case 1: PIFP
- 61 yr old female
- 2 years previously felt pain around R maxilla
- Attended dentist
  - No findings. Performed 'deep' cleaning
  - Pain worse
  - Attended ENT, endoscopic sinus exam, no finding
  - Pain worsened considerably
- Attended TMD specialist
  - Trigger point injections
  - Biteplate
- Family physician
  - Prescribed pregabalin, tramadol.
  - No response
Case 1: PIFP

- Attended OFP clinic
- Pain was present all day
  - Usually dull, deep
  - Rarely throbbing
  - Had spread to lower jaw
- Exam
  - No dental pathology
  - No cervical/pericranial muscle tenderness
  - No functional problems cervical, masticatory
  - Cranial nerve exam intact
  - MRI brain (enhanced)- normal
  - Neurology consult- normal
- Tx
  - CBT
  - Nortriptyline

PIFP: ICHD-3 Beta Criteria

A. Facial and/or oral pain fulfilling criteria B and C
B. Recurring daily for >2 hours per day for >3 months
C. Pain has both of the following characteristics:
   1. Poorly localized, and not following the distribution of a peripheral nerve
   2. Dull, achinging or nagging quality
D. Clinical neurological examination is normal
E. A dental cause has been excluded by appropriate investigations
F. Not better accounted for by another ICHD-3 diagnosis

PIFP Clinical Features

- Onset: Often associated with minor surgical or other invasive procedures (ENT, dental)
  - "Chicken or the egg"?
- Quality: Burning, throbbing and often stabbing
- Severity: Mild to severe and rated approximately 7 on a VAS
- Disconnect between reported VAS and patient behavior
- Comorbidity: CWSP, IBS, psychosocial disability
- Prognosis: Mostly years of recalcitrant daily pain
  - Some reports of pain free periods
  - Tends to spread with time
PIFP – Treatment options

- No clear pathophysiological basis!
  - Tricyclic antidepressants
    - Nortriptyline/Amitriptyline
  - SNRIs
    - Duloxetine
  - Anticonvulsants
    - Gabapentin/Pregabalin
  - Physical Modalities
    - Low level laser
  - Behavioral Interventions
    - CBT

Painful Traumatic Trigeminal Neuropathy (PTTN)

PTTN: ICHD-3 Beta Criteria

A. Facial and/or oral pain in the distribution(s) of one or both trigeminal nerve(s) and fulfilling criterion C.
B. History of an identifiable traumatic event to the trigeminal nerve(s) with clinically evident +ve and/or −ve signs of trigeminal nerve dysfunction.
C. Evidence of causation demonstrated by both of the following:
   1. Pain is localized to the distribution(s) of the trigeminal nerve(s) affected by the traumatic event.
   2. Pain has developed <6 months after the traumatic event.
D. Not better accounted for by another ICHD-3 diagnosis.
Post Surgical pain- not rare

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Estimated incidence of chronic pain</th>
<th>Estimated chronic severe/disabling pain</th>
<th>U/S surgical volume (if known)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amputation</td>
<td>30-50%</td>
<td>5-30%</td>
<td>1/3 (iossion limited)</td>
</tr>
<tr>
<td>Breast surgery (lumpectomy and reconstruction)</td>
<td>20-30%</td>
<td>5-20%</td>
<td>479</td>
</tr>
<tr>
<td>Thoracotomy</td>
<td>30-40%</td>
<td>20%</td>
<td>Unknown</td>
</tr>
<tr>
<td>Inguinal hernia repair***</td>
<td>20-40%</td>
<td>2-4%</td>
<td>509</td>
</tr>
<tr>
<td>Carotid artery bypass surgery **</td>
<td>30-50%</td>
<td>5-30%</td>
<td>210</td>
</tr>
<tr>
<td>Carcinoma surgery**</td>
<td>30%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

* Left shoulder surgery not included, since preoperative diagnosis of pain specifically from gable is difficult and assistance postoperative pain could therefore be related to other extra abdominal disorders. (National Center for Health Statistics, Ambulatory and Inpatient Procedures, USA, 2016)

Case 2: PTTN

PTTN – Clinical Features

- Pain in area of injury, or at the distal dermatome. May be precisely located to the dermatome of the affected nerve.
- Unilateral
  - May become diffuse and spread across dermatomes.
  - Rarely if ever crosses the midline.
- Usually continuous, lasting most of the day and on most days.
  - Paroxysmal pain may be spontaneous or initiated by touch or function
- Pain is of moderate to severe intensity (VAS 5-8)
  - Usually burning or shooting

Pharmacologic Treatment Algorithm

Medical Status
- TCA
  - Amitriptyline
  - Nortriptyline
- AEDs
  - Gabapentin
  - Pregabalin
- Combine TCA/AED
- Combine SNRI/GBP
- Combine Opioid/GBP
- Tramadol, Opioids, Topicals

Pathophysiology?

Results of Injury

Tissue Injury
- With pain and no signs
  - Neurologic Signs?
  - None: Recovery
- With pain: Painful Neuropathy
- No pain: Non-Painful Neuropathy