Proliferative Myositis: An Uncommon Cause of Recurrent Trismus and Facial Swelling

Kevin J. Quinn, MD; Lexie L. Wang, MD; Evan R. Reiter, MD
Department of Otolaryngology – Head & Neck Surgery
Virginia Commonwealth University School of Medicine, Richmond, Virginia, USA

Case Presentation

History and Examination:
- 56-year-old otherwise healthy female with no history of tobacco or alcohol use presented with recurrent, acute onset left facial swelling and trismus without paresthesia, weakness, headache, or vision changes.
- No evidence of odontogenic pathology on panoramic radiograph evaluation with oral-maxillofacial surgery, and no purulence on attempted intraoral incision and drainage.
- Treatment with oral dicloxacillin, amoxicillin-clavulanate, clindamycin, and prolonged ciprofloxacin did not result in lasting improvement.
- Physical exam notable for trismus to 1 cm at the incisal, no visible/palpable oral or oropharyngeal abnormalities, tonsils 1+ without crypts/debris, no cranial neuropathies.

Diagnostic Testing:
- Selected laboratory values are shown in Table 1. Comprehensive metabolic panel and complete blood count were otherwise unremarkable. IgA, IgG, IgM, and IgM levels were normal at the second lab draw.
- Computed tomography (CT) imaging (obtained prior to presentation): Figure 1
- Magnetic Resonance Imaging (MRI): Figure 2

Biopsy: Marked fibrosis of the subcutaneous tissue adjacent to the retromolar trigone, as well as the anterior border of the masseter muscle.

Histologic findings: Figure 3

Treatment:
- Started prednisone (40mg daily for 1 week with subsequent taper) during post-operative course with significant improvement in her discomfort and trismus.
- Additional month of prednisone 10mg daily with ibuprofen for pain control prescribed per Rheumatology recommendation.
- Follow-up several months later revealed complete resolution of pain, swelling, and trismus.

Laboratory Values

<table>
<thead>
<tr>
<th>Laboratory Value</th>
<th>Following first visit</th>
<th>Following treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>White blood cell count</td>
<td>8.4 10^9/L</td>
<td>11.2 10^9/L</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>102mm in 1 hour</td>
<td>57mm in 1 hour</td>
</tr>
<tr>
<td>Erythrocyte sedimentation rate</td>
<td>6.9 mg/dL</td>
<td>0.4 mg/dL</td>
</tr>
<tr>
<td>C-reactive protein</td>
<td>Negative</td>
<td>Not repeated</td>
</tr>
<tr>
<td>ANA Screen</td>
<td>Negative</td>
<td>Not repeated</td>
</tr>
<tr>
<td>Cytoplasmic ANA</td>
<td>&lt;1:20 titer</td>
<td>Not repeated</td>
</tr>
<tr>
<td>Perinuclear</td>
<td>&lt;1:20 titer</td>
<td>Not repeated</td>
</tr>
<tr>
<td>Neutrophil</td>
<td>&lt;1:20 titer</td>
<td>Not repeated</td>
</tr>
<tr>
<td>Anti-ANCA</td>
<td>&lt;15 IU/mL</td>
<td>Not repeated</td>
</tr>
<tr>
<td>Rheumatoid factor</td>
<td>Not repeated</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Laboratory values following first clinical visit and after treatment with steroids. Significant values in bold/red.

Diagnostic Testing (continued):

ANA = antinuclear antibody
ANCA = antineutrophil cytoplasmic antibody
IU = international units

References: