A Case Report: Spontaneous Septic Subacromial Bursitis Due to Streptococcus anginosus
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Introduction:
- 67 year old male presented to clinic with 1-2 weeks of right shoulder pain, 8/10 achy, no radiation, worse with flexion and extension, improved with ice
- Gastroenteritis 3 days prior with fever of 102°F and vomiting
- History is significant for HTN, T2DM, OA, bilateral total knee replacements, previous tobacco user, allergies to penicillin and sulfa

Clinical Course:
- Physical Exam: Vital signs within normal limits. Right shoulder active abduction 30°, passive abduction 80°, 4/5 external and internal rotation, remainder of exam deferred due to pain. Normal left shoulder exam
- Diagnosed with rotator cuff tear and started physical therapy
- Initial x-ray negative, lab work unremarkable
- Pain continued, prompting a clinic visit the next day
- MRI revealed ruptured subacromial bursa/subdeltoid bursa with extensive synovitis and partial thickness tear
- Aspiration of the bursa under ultrasound guidance grew Streptococcus anginosus
- Started on IV Clindamycin 600mg q6h and taken to the OR for I&D of subacromial bursa and surrounding tissues
- Arranged for hospital admission, lab work significant for ESR 96, CRP 16,99, WBC 10K
- OR cultures also positive for Streptococcus anginosus, Blood cultures remained negative
- Patient discharged on Ceftriaxone 2g daily for four weeks
- Found to have PICC line associated infection with bacteroides fragilis and antibiotics switched to Ertapenem

Discussion:
- Septic subacromial bursitis is rare due to the nature of the anatomic location of the deep bursa¹
- It is usually seen in immunocompromised patients, after corticosteroid injections, or if there is a hematogenous spread from another source²
- Of the cases reported in literature, 80% are caused by Staphylococcus aureus²
- Streptococcus anginosus is part of the normal flora of the oral cavity and gastrointestinal tract
- It can spread hematogenously and is known for its ability to cause abscesses
- Streptococcus anginosus has been seen in pubic symphysis and sternoclavicular joint infections³,⁴
- There have been no reported cases of Streptococcus anginosus causing septic subacromial bursitis

Conclusion:
- In patient’s with atypical shoulder pain, the differential diagnosis should include infection
- Physiatrists should maintain a higher index of suspicion given the consequences of unrecognized infections

References:

Table 1: ROM = range of motion, AROM = active range of motion, PROM = passive range of motion, *Not tested

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<thead>
<tr>
<th></th>
<th>AROM</th>
<th>PROM</th>
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<tbody>
<tr>
<td>Flexion</td>
<td>62°</td>
<td>90°</td>
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<tr>
<td>Abduction</td>
<td>48°</td>
<td>92°</td>
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<tr>
<td>External Rotation</td>
<td>*</td>
<td>41°</td>
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<tr>
<td>Internal Rotation</td>
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<td>66°</td>
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Figure 1: T2 weighted MRI Right Shoulder - large fluid collection in subacromial/subdeltoid bursa, appears ruptured with fluid extending laterally along humeral shaft, synovial thickening and enhancement. Partial thickness rotator cuff tear.