Streamlining services in musculoskeletal radiology: Ultrasound-guided injections

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<table>
<thead>
<tr>
<th>GTPS – what is it?</th>
<th>Painful debilitating condition of the hip due to gluteus minimus or medius tendinopathy. ¹</th>
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<tr>
<td>Treatment options</td>
<td>Options range from rest and physiotherapy to steroid injections and surgery. ²</td>
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<td>Steroid injections</td>
<td>Can be administered using image-guidance or clinically using anatomical landmarks. ³</td>
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Rationale for the current audit

- Pressure on Radiology department due to high volume of requests for ultrasound-guided injections (USG).
- Limited evidence to suggest effectiveness of image-guided injections vs blind for GTPS. ⁴ ⁵ ⁶
- To clarify referral source of GTPS patients in our department.
- Provide basis for a business case and streamlining of GTPS pathway.

Questions

1. Should blind attempt precede referral for USG-injection?
2. Does a pathway need to be developed to streamline the service and help reduce service pressure?

Method

- 1 year retrospective review of GTPS cases from RIS
- Documentation of previous blind attempt
- Referral source
- Review of published literature in the treatment of GTPS.

Results

- Total number of USG-injections performed in Radiology: 290
- Number of patients treated for GTPS: 88
  - 2 (2.3%) had documented evidence for blind attempt before referral
  - 23 (26%) had documented evidence for a previous USG-attempt
  - 82% of referrals are from Trauma &Orthopaedics

Discussion

- A literature review revealed no definite evidence for USG-injection being superior to blind-injection.
  - A large randomised trial (RCT) is underway to answer this question more fully. ⁵
  - The majority of the workload (80%) is from Trauma and Orthopaedics (T&O), which as an outpatient department has scope to develop a pathway with Radiology.

Recommendations

- Await RCT results to further inform the use of USG-injections for GTPS.
- Consider implementing stricter referral criteria for USG-GTPS i.e. blind attempt prior to referral for image-guided attempt.
- Use referral findings to develop clinical pathway with Trauma & Orthopaedic colleagues to streamline the GTPS service and balance the workload between them and Radiology.
- Re-assess service after any implementation

References

- ⁵ Cohen SJ et al. Comparison of fluoroscopically guided and blind corticosteroid injections for GTPS: randomized controlled trial. BMJ. 2012; 345: e5188

Figure 1: Ultrasound-Guided Injection

Figure 2: Sources of referrals to Radiology for USG-GTPS injection