The patient was an 18-year-old male collegiate pitcher who was referred to physical therapy for the treatment of chronic posterior right shoulder pain, which was most noticeable during the late cocking phase of throwing. Previous imaging included shoulder radiographs and magnetic resonance imaging, which were interpreted as normal. The patient had already completed a course of rehabilitation and underwent diagnostic arthroscopy 3 months prior, that only revealed a small, pedunculated lesion near the superior glenohumeral ligament, which was debrided. Despite these interventions, the patient’s shoulder pain did not improve.

After limited improvement with the most recent rehabilitation program, additional radiographs and a magnetic resonance arthrogram were ordered. The radiographic axillary view (FIGURE 1) and magnetic resonance arthrogram (FIGURE 2) both revealed an exostosis along the posterior inferior glenoid rim, which was not visualized on the initial imaging completed 7 months prior. Following arthroscopic removal of the exostosis, the patient’s symptoms resolved and he is now throwing without pain or limitations.

The diagnostic imaging findings seen in this patient were consistent with a thrower’s exostosis, which is also referred to as a Bennett lesion. The exostosis is thought to be the result of stress at the insertion of the posterior capsule and the posterior band of the inferior glenohumeral ligament complex in individuals involved in throwing sports. A thrower’s exostosis is commonly unrecognized on standard radiographs. Although not included in the diagnostic imaging for this patient, the Stryker radiographic view (obtained with the patient supine and the hand of the affected extremity placed on top of the head, with the anterior to posterior X-ray beam angled 15° cephalad, centered on the coracoid process) may allow for earlier identification of the thrower’s exostosis. Therefore, the Stryker view is commonly recommended as part of the routine imaging series for athletes with posterior shoulder pain who are involved in throwing sports.

Reference


Thrower’s Exostosis in a Collegiate Pitcher

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FIGURE 1. West Point axillary view demonstrating a posterior inferior glenoid rim osteophyte or thrower’s exostosis (arrow). This radiographic view was obtained with the patient prone, shoulder abducted to 90°, and the X-ray beam directed at the axilla, angled 25° medially and anteriorly.

FIGURE 2. Axial T1-weighted, fat-saturated magnetic resonance arthrogram image demonstrating increased thickness and low signal intensity along the posterior inferior glenoid rim, consistent with a thrower’s exostosis (arrow).