

Letter to the Editor

A Few Considerations on “A Rare Cause of Shoulder Pain Ganglion Cyst of the Acromioclavicular Joint”: A Letter to the Editor

Lee C. Tse, MD¹; Zhi-Hong Zheng, MD^{1,2*}

¹Department of Orthopedic Surgery, National Defense Medical Center, Tri-Service General Hospital, Neihu 114, Taipei, Taiwan

²Department of Orthopedic Surgery, Hualien Armed Forces General Hospital, Taiwan, Republic of China

*Corresponding author

Zhi-Hong Zheng, MD

Department of Orthopedic Surgery, National Defense Medical Center, Tri-Service General Hospital, Neihu 114, Taipei, Taiwan; Department of Orthopedic Surgery, Hualien Armed Forces General Hospital, Taiwan, Republic of China; E-mail: rara540@gmail.com

Article information

Received: September 6th, 2022; Accepted: September 15th, 2022; Published: September 21st, 2022

Cite this article

Tse LC, Zheng Z-H. A few considerations on “a rare cause of shoulder pain ganglion cyst of the acromioclavicular joint”: A letter to the editor. *Osteol Rheumatol Open J.* 2022; 4(1): 1-2. doi: [10.17140/ORHOJ-4-116](https://doi.org/10.17140/ORHOJ-4-116)

TO THE EDITOR

We are very interested in the article by Sarman et al.¹ A rare cause of shoulder pain: Ganglion cyst of the acromioclavicular joint.¹ Ganglion cyst often induces severe pain and impairs quality of life, even with multi-modal therapies. The ganglion cyst commonly develops along the tendons or joints. Ganglion cysts are typically round or oval shape and filled with a jellylike fluid. We appreciated the rare case report by Sarman et al.¹ Sarman et al¹ performed an image investigation to clarify the tissue content by an X-ray and an magnetic resonance imaging (MRI) examination. They found a 10×8×5 cm mass which was homogenous fluid contained with a septum. And the lesion had several cysts in the T2 image. Although, it looked like a benign lesion as the author described, a painful mass raised the alarm. The possibility of malignant change is because of the lesion size which is bigger than 5 cm as well as a deep mass or one adhering to the fascia.² Conversely, a mass that moves with the muscle tissues is probably superficial and less likely to be malignant.³

According to the X-ray, the acromion-humeral head interval was decreased, the humeral head was upper migrated, and osteophyte over the greater trochanter of the humeral head, which indicated the rotator cuff tear lesion was not a small lesion.⁴ The incidence of partial thickness rotator cuff tear (PTRCT) is age dependent, with 6% of individuals younger than 40-years having an asymptomatic PTRCT, increasing to 26% of those older than 60-years.⁵ Non-surgical treatment of PTRCT includes oral and/or subacromial anti-inflammatory medications, physical therapy, pain medications, and biologic modalities such as platelet-rich plasma injections. Patients with smaller tears have a good outcome with non-surgical management of PTRCT. Leaving the rotator cuff

tear untreated may not be sufficient for shoulder pain. Surgeons often use 50% of footprint tears as an indication for surgery for PTRCT. This recommendation began with a classic 1999 article discussing 65 patients with tear size of 50% or more who were treated with either arthroscopic acromioplasty alone or combined with mini-open rotator cuff repair.⁶ Although significant for the size of the cohort and follow-up, patients were not randomized to acromioplasty *versus* repair, and there was no control group without repair. Thus, although the “50% rule” is commonly used to determine when root canal treatment (RCT) should be repaired, the cutoff for a critical lesion is not well-defined. According to our experience, the acromio-humeral impingement which can be seen on the X-ray in abduction posture is a pain source in the shoulder joint. Maybe treating the ganglion cyst only but left the rotator cuff alone was not sufficient for shoulder pain. We fully agree that surgical excision improved the symptoms and function.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

REFERENCES

1. Sarman H, Celik M, Bala MM. A rare cause of shoulder pain: Ganglion cyst of the acromioclavicular joint. *Osteol Rheumatol Open J.* 2016; 1(1): 20-22. doi: [10.17140/ORHOJ-1-107](https://doi.org/10.17140/ORHOJ-1-107)
2. Johnson CJ, Pynsent PB, Grimer RJ. Clinical features of soft tissue sarcomas. *Ann R Coll Surg Engl.* 2001; 83: 203-205.
3. Rochwerger A, Mattei J-C. Management of soft tissue tumors of the musculoskeletal system. *Orthop Traumatol Surg Res.* 2018;

104(1S): S9-S17. doi: [10.1016/j.otsr.2017.05.031](https://doi.org/10.1016/j.otsr.2017.05.031)

4. Dimitriou D, Mazel P, Hochreiter B, et al. Superior humeral head migration might be a radiological aid in diagnosing patients with adhesive capsulitis of the shoulder. *JSES Int.* 2021; 5(6): 1086-1090. doi: [10.1016/j.jseint.2021.06.008](https://doi.org/10.1016/j.jseint.2021.06.008)

5. Safran O, Schroeder J, Bloom R, Weil Y, Milgrom C. Natural

history of nonoperatively treated symptomatic rotator cuff tears in patients 60 years old or younger. *Am J Sports Med.* 2011; 39: 710-714. doi: [10.1177/0363546510393944](https://doi.org/10.1177/0363546510393944)

6. Kim Y-S, Kim S-E, Bae S-H et al. Tear progression of symptomatic full-thickness and partial-thickness rotator cuff tears as measured by repeated MRI. *Knee Surg Sports Traumatol Arthrosc.* 2017; 25: 2073-2080. doi: [10.1007/s00167-016-4388-3](https://doi.org/10.1007/s00167-016-4388-3)