Bicipitoradial bursitis in a patient with rheumatoid arthritis

Pui Shan Julia Chan

ABSTRACT

Abstract is not required for Clinical Images

All Articles Open Access

International Journal of Case Reports and Images (IJCRI)

International Journal of Case Reports and Images (IJCRI) is an international, peer reviewed, monthly, open access, online journal, publishing high-quality, articles in all areas of basic medical sciences and clinical specialties.

Aim of IJCRI is to encourage the publication of new information by providing a platform for reporting of unique, unusual and rare cases which enhance understanding of disease process, its diagnosis, management and clinico-pathologic correlations.

IJCRI publishes Review Articles, Case Series, Case Reports, Case in Images, Clinical Images and Letters to Editor.

Website: www.ijcasereportsandimages.com

Bicipitoradial bursitis in a patient with rheumatoid arthritis

Pui Shan Julia Chan

CASE REPORT

A 63-year-old Chinese female with seropositive rheumatoid arthritis (RA) presented with three days history of painful left forearm swelling and fever after switching to anti-tumor necrosis factor therapy for two months. There was no recent history of injury reported. Physical examination showed a swelling at the antecubital area which was tender on palpitation. X-ray of elbow and forearm were normal. Blood test showed elevated C-reactive protein 108 ng/L (<5 ng/L) and ESR 119 mm/hr (3–28 mm/hour). Initial diagnoses were cellulitis, inflammatory lesion or soft tissue mass. Ultrasonography demonstrated a poorly compressible, well-circumscribed anechoic collection with both solid and fluid component surrounding the distal biceps tendon (Figure 1), over the anterior aspect of cubital fossa (Figure 2) with power Doppler signals. The elbow joint was normal without synovitis or effusion. Sonographic features suggestive of bicipitoradial bursitis need to rule out septic bursitis. Ultrasound-guided aspiration and decompression of the lesion was performed, yielded slight blood-stained fluid, both bacterial and mycobacterium culture was negative. Her fever responded to course of antibiotics and anti-inflammatory drugs. The swelling completely resolved after one week.

Pui Shan Julia Chan

Affiliations: 'MBBS (HK), MRCP (UK), FHKAM, Associate consultant, Department of Medicine, Queen Elizabeth Hospital, 30 Gascoigne Road, Kowloon, Hong Kong Special Administrative Region.

Corresponding Author: Pui Shan Julia Chan, Associate consultant, Department of Medicine, Queen Elizabeth Hospital, 30 Gascoigne Road, Kowloon, Hong Kong Special Administrative Region, Email: juliapschan@gmail.com

Received: 07 December 2015

Accepted: 24 December 2015

Published: 01 March 2016

Figure 1: Bicipitoradial bursitis in a patient with rheumatoid arthritis. Ultrasound scan of antecubital area in transverse view showed an anechoic lesion (*) surrounding the distal biceps tendon suggestive of bicipitoradial bursitis.

Figure 2: Ultrasound scan in longitudinal view showing the distended bicipitoradial bursa (b).

DISCUSSION

Bicipitoradial bursitis is an uncommon condition, mostly due to repetitive mechanical trauma or overuse. Other causes include tear of the distal biceps tendon,

inflammatory diseases like rheumatoid arthritis or psoriatic arthritis, infection, chronic renal failure or very rarely villonodular synovitis, osteochondromatosis and amyloidosis [1–4]. Anatomically, distal biceps tendon is covered by a paratenon instead of a synovial sheath. It is inserted to the radial tuberosity. In order to reduce friction during pronation of the forearm, a bursa, named bicipitoradial bursa, which contains synovial lining, is presented between the distal biceps tendon and the radial tuberosity. It is not connected to elbow joint directly and exhibits a horseshoe-shaped appearance as it warps around the distal biceps tendon. As in this case, the bursa was so distended with fluid that almost surrounded the adjacent distal biceps tendon, mimicking a tenosynovitis process [5]. The mass effect of the distended bursa can also compress on the deep radial nerve causing entrapment [6]. Sonographically may not be easy to differentiate from the adjacent distal biceps tendon which might exhibit anisotropy. Pronation of the forearm is recommended to delineate bursa space from the tendon itself [7].

CONCLUSION

Although bursitis is common in patient with inflammatory arthritis, antecubital fossa lesion is still a challenging condition for clinician in daily practice. The awareness of the anatomy is curial in identify the cause of swelling over proximal forearm. In this case, the development of bicipitoradial bursitis is probably related to active rheumatoid arthritis with fluid accumulation and thickening of bursal wall. Nevertheless, infective cause especially tuberculosis should always be the differential diagnosis for patients receiving biologics.

Keywords: Bicipitoradial bursitis, Distal biceps tendon, Musculoskeletal ultrasound, Rheumatoid arthritis

How to cite this article

Chan PSJ. Bicipitoradial bursitis in a patient with rheumatoid arthritis. *Int J Case Rep Images* 2016;7(3):201–203.

Article ID: Z01201603CL10099PC

doi:10.5348/ijcri-201606-CL-10099

Author Contributions

Pui Shan Julia Chan – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

Copyright

© 2016 Pui Shan Julia Chan. This article is distributed under the terms of Creative Commons Attribution License which permits unrestricted use, distribution and reproduction in any medium provided the original author(s) and original publisher are properly credited. Please see the copyright policy on the journal website for more information.

REFERENCE

1. Sofka CM, Adler RS. Sonography of cubital bursitis. *AJR Am J Roentgenol* 2004 Jul;183(1):51–3.
2. Nishida J, Furumachi K, Ehara S, Satoh T, Okada K, Shimamura T. Tuberculous bicipitoradial bursitis: a case report. *Skeletal Radiol* 2007 May;36(5):445–8.
3. Ng C, Bibiano L, Grech S, Magazinovic B. Antecubital Fossa Solitary Osteochondroma with Associated Bicipitoradial Bursitis. *Case Rep Orthop* 2015;2015:560372.
4. Felea I, Fodor D, Schiotis R, Georgiu C, Bojan A, Rednic S. Ultrasound findings in AL musculoskeletal amyloidosis. *Med Ultrason* 2011 Mar;13(1):76–9.
5. Jacobson JA. Fundamentals of musculoskeletal ultrasound. Philadelphia, PA: Elsevier Saunders; 2007.
6. Skaf AY, Boutin RD, Dantas RW, et al. Bicipitoradial bursitis: MR imaging findings in eight patients and anatomic data from contrast material opacification of bursae followed by routine radiography and MR imaging in cadavers. *Radiology* 1999 Jul;212(1):111–6.
7. Bianchi S, Martinoli C. Ultrasound of the Musculoskeletal System. Berlin, Heidelberg: Springer Verlag; 2007.

Access full text article on
other devices

Access PDF of article on
other devices

Edorium Journals: An introduction

Edorium Journals Team

About Edorium Journals

Edorium Journals is a publisher of high-quality, open access, international scholarly journals covering subjects in basic sciences and clinical specialties and subspecialties.

Invitation for article submission

We sincerely invite you to submit your valuable research for publication to Edorium Journals.

But why should you publish with Edorium Journals?

In less than 10 words - we give you what no one does.

Vision of being the best

We have the vision of making our journals the best and the most authoritative journals in their respective specialties. We are working towards this goal every day of every week of every month of every year.

Exceptional services

We care for you, your work and your time. Our efficient, personalized and courteous services are a testimony to this.

Editorial Review

All manuscripts submitted to Edorium Journals undergo pre-processing review, first editorial review, peer review, second editorial review and finally third editorial review.

Peer Review

All manuscripts submitted to Edorium Journals undergo anonymous, double-blind, external peer review.

Early View version

Early View version of your manuscript will be published in the journal within 72 hours of final acceptance.

Manuscript status

From submission to publication of your article you will get regular updates (minimum six times) about status of your manuscripts directly in your email.

Our Commitment

Six weeks

You will get first decision on your manuscript within six weeks (42 days) of submission. If we fail to honor this by even one day, we will publish your manuscript free of charge.

Four weeks

After we receive page proofs, your manuscript will be published in the journal within four weeks (31 days). If we fail to honor this by even one day, we will publish your manuscript free of charge and refund you the full article publication charges you paid for your manuscript.

Most Favored Author program

Join this program and publish any number of articles free of charge for one to five years.

Favored Author program

One email is all it takes to become our favored author. You will not only get fee waivers but also get information and insights about scholarly publishing.

Institutional Membership program

Join our Institutional Memberships program and help scholars from your institute make their research accessible to all and save thousands of dollars in fees make their research accessible to all.

Our presence

We have some of the best designed publication formats. Our websites are very user friendly and enable you to do your work very easily with no hassle.

Something more...

We request you to have a look at our website to know more about us and our services.

We welcome you to interact with us, share with us, join us and of course publish with us.

Edorium Journals: On Web

Browse Journals

CONNECT WITH US