

**BONY PROJECTION ALONG LATERAL BORDER OF SCAPULA- A CASE REPORT**Preeti Goswami<sup>1</sup>, Yogesh Yadav<sup>2</sup><sup>1</sup>Assistant Professor, Department of Anatomy, MAMC, Delhi.<sup>2</sup>Associate Professor, Department of Anatomy, Dr. Baba Saheb Ambedkar Medical College and Hospital, Rohini, Delhi.**ABSTRACT****BACKGROUND**

Scapula is an irregular triangular bone with two surfaces, three projections and three borders. The three borders of the scapula are- Superior, medial and lateral. The lateral border extends from the infraglenoid tubercle and inferior angle. Normally, all borders including the lateral border are straight. But in the present case we detected an anomalous bony growth projecting from the lateral border of the scapula. The bony growth is triangular in shape. This is a rare feature, which may compress neurovascular structures. These may be probably due to over worked/stress during biomechanical movements of the scapula, calcium metabolism disorder and defects of endochondral ossification or may be a manifestation of osteochondroma. The bony outgrowths may impinge on the surrounding structures causing bundle of complications. The knowledge will be of utmost use to anatomists, clinicians and radiologists.

**KEYWORDS**

Lateral Border of Scapula; Bony Projection.

**HOW TO CITE THIS ARTICLE:** Goswami P, Yadav Y. Bony projection along lateral border of scapula- a case report. Journal of Research in Human Anatomy and Embryology 2017; Vol. 3, Issue 1, Jan-June 2017; Page: 7-8.

**BACKGROUND**

The scapula also known as the shoulder blade is a triangular, flat bone of shoulder girdle that articulates with the head of humerus at the glenohumeral joint, which is known as shoulder joint and with the lateral end of clavicle at the acromioclavicular joint. Scapula has three borders, three angles and three processes. Superior border of scapula is thin and short. It has suprascapular notch near the root of coracoid process. Lateral border of scapula is thick and presents the infraglenoid tubercle at the upper end. Medial border is thin extends from the superior angle to the inferior angle. The lateral border gives attachment to the teres minor in the upper two-third part and teres major in the lower one-third part of the lateral border. The lateral border is also related to the lower subscapular nerve, thoracodorsal nerve, subscapular artery and its branch, the circumflex scapular artery.

**CASE REPORT**

During osteology demonstration of scapulae to first year MBBS students, a scapula was found to have triangular bony growth protruding from the lateral border of the scapula near inferior angle (Figure 1).

**DISCUSSION**

We can classify bony growths originating from bones into three groups- (a) Osteophytes- those arising from joint margins, (b) Bony tumours and (c) Enthesophytes- those arising at the sites of attachments of tendons and ligaments.<sup>(1)</sup>

The bony growth in the present study is either enthesophytes or tumour of scapula. It cannot be osteophyte, as it presents away from articular surface. The individual might have seronegative spondylarthritis; it may be part of new bone that can be formed at individual entheses in response to a seronegative spondylarthritis.<sup>(2)</sup> It might have been caused by excessive strain during biomechanical movements of scapula involving teres major and teres minor muscles or due to calcium metabolism disorder. It may be Diffuse Idiopathic Skeletal Hyperostosis (DISH), the condition first described in the spine by Forrester and Rotes-Quero.<sup>(3)</sup> It may be part of the tumour of the scapula like osteochondroma of bone. If such types of bony growth are encountered, then the individual should be examined for signs and symptoms of seronegative spondylarthritis and DISH syndrome or complaints of osteochondroma.

Bony projections have been reported projecting from Foramen magnum,<sup>(4)</sup> External occipital protuberance,<sup>(5)</sup> olecranon process of ulna<sup>(6)</sup> obturator foramen<sup>(7)</sup> and Iliac crest.<sup>(8)</sup> But bony growths from the lateral border of the scapula are not described in standard text books except R. Singh found similar finding in 3 scapulae.<sup>(9)</sup> As teres major muscle attached to lower part of lateral border, it may be impinged by this growth leading to spasm and pain during movements of scapula. The lateral border is also related to the lower subscapular nerve, thoracodorsal nerve, the subscapular artery lies in close relation of the bony projection which may be damaged leading to neurovascular complications. Moreover, the bony growth may mislead the radiologist for abnormal structure. Thus, knowledge of this type of bony projection may be of great importance to anatomists, clinicians and radiologists.

**CONCLUSION**

The bony outgrowths may have several effects on the surrounding structures causing lots of complications. The knowledge of these outgrowths will be beneficial to anatomists, clinicians and radiologists.

*Financial or Other, Competing Interest: None.*

*Submission 26-12-2016, Peer Review 20-03-2017,*

*Acceptance 26-03-2017, Published 27-05-2017.*

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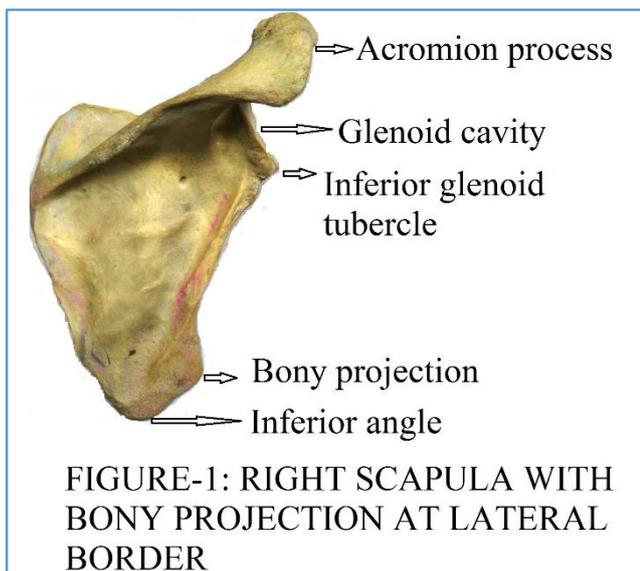
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