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Defect in Scapula: A Rare Case Report

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Abstract: Defect in scapula is a rare presentation. Congenital malformations of the scapula, ranging from complete absence, to abnormal shape and position (Sprengel anomaly) are encountered. In this study we report one such case with a defect in scapular body. The borders or margins were regular. A 26 yrs old male presented to us with history of trauma to left shoulder 1 yr back. On X-ray defect in the body of scapula was found. The patient was further investigated on the basis of which we had differentials in our mind such as congenital defect, pseudolesion, tumor, traumatic defect. These were further ruled out on the basis of aetiopathogenesis, investigations, clinical and radiographic assessment. This is a rare finding. On the basis of investigations, clinical picture and radiological assessment, we concluded that the defect found may be traumatic. At the same time congenital defect or normal variation of scapula should also be considered.
Keywords: Scapula, Defect, Traumatic, Congenital, Normal variation, Rare.

INTRODUCTION

Defect in scapula is a rare presentation. Congenital malformations of the scapula, ranging from complete absence, to abnormal shape and position (Sprengel anomaly) are encountered [1]. Scapula fracture most commonly results from substantial direct trauma (a crush accident or fall from some height) and the possibility of child abuse must also be considered [2]. The defect most probably represents an area in which bone did not develop. This type of defect has not been identified in children, possibly because the scapula is incompletely ossified. The recognition of the benign nature of these defects is important, since they could be confused with primary or secondary malignancy.

Defects in the scapula are unusual. At birth a large part of the scapula is osseous. The adult scapula is formed by the subsequent addition of seven or more nuclei of ossification. At about 15 years, the first of two or more secondary centers at the inferior angle and at the medial border begin to ossify. In this study we report one such case with a defect in scapular body.

CASE REPORT

26 yrs old male underwent RTA and presented to our OPD with complaints of pain over left shoulder. Clinically the patient had pain, swelling and tenderness over the left shoulder. The movements were restricted due to pain. Radiological assessment in the form of X-ray showed normal shoulder joint but the scapula showed a lesion (Fig 1,2). 3D CT scan was done which showed defect in the scapular body (Fig 3, 4). CT scan was normal (Fig 5). The patient was further investigated in the form of blood tests, and MRI to confirm the diagnosis. All the blood investigations were within normal limit. ESR, CRP were normal, which ruled out any infectious pathology. Further MRI was done which was within normal limits and didn't show any active changes other than the defect. The patient was provided with analgesics for shoulder pain and was kept under regular follow-up to assess the nature of defect. Now after 3 yrs of follow-up the defect is the same and has not increased or decreased in size. The patient has no fresh complaints.

DISCUSSION

Fractures of the scapula are very rare. These fractures commonly result from substantial direct trauma over the scapular region. The radiographic diagnosis of scapular fractures can be a challenge due to overlapping anatomy. These fractures are usually missed while treating the fractures around the shoulder joint. If these fractures are present or suspected, one should not hesitate to obtain a CT scan, which can demonstrate small bony fragments that in the majority of cases accompany avulsions in the shoulder [3, 4]. However, we believe that a radiographic study is mandatory in similar cases to rule out unexpected injuries of the bony structures of the chest wall and scapula, or if non-accidental injury is suspected.

Commonly encountered pseudolesions that may give the impression of true osteolytic or cystic lesions on plain radiographs include the superolateral

humeral head, rhomboid fossa of the clavicle, scapular defects, the supratrochlear foramen, and an anterior lytic defect of the calcaneus [5]. Occasionally, a positioning, in which the scapula projects over a vertebral body, results in an increased opacity that simulates sclerosis on a lateral chest radiograph [6].

The body of scapula mainly the region below the spine of scapula is generally papery thin in consistency and so the chances of fracture even due to a low velocity trauma are more. In such cases, traumatic fracture leading to a defect should be considered.

Defect in the scapula is a very rare presentation. The investigations being well within normal limits the chances of any infective foci were ruled out. MRI didn't show any aggressive lesion which may mimic tumor. In this case we could only speculate the patient on the basis of investigations, x-rays, MRI and clinically.

There was not any case reported earlier with such a defect. We concluded that the traumatic defect in the scapula is an unusual presentation and can be treated conservatively without any complications.

Fig. 1: X ray left shoulder

Fig. 2: X ray left shoulder

Fig. 3: 3D CT Left Scapula

Fig. 4: 3D CT Left Scapula

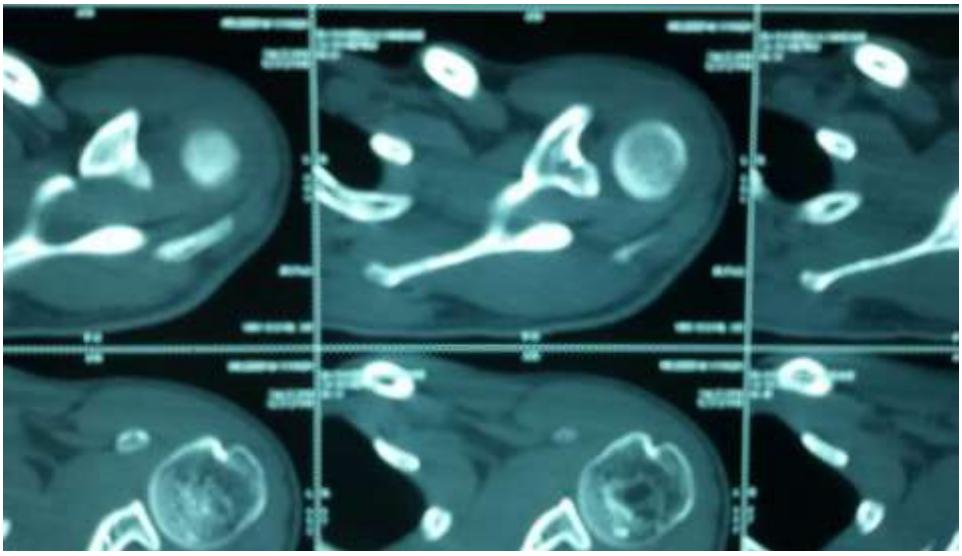

Fig. 5: CT left shoulder

CONCLUSION

Defect in scapula may present as a pseudolesion. But sometimes it may be a normal variation of the scapula or may be a congenital defect. In our study we concluded that the defect probably was a traumatic defect.

REFERENCES

1. Williams MS; Developmental anomalies of the scapula-the "omo"st forgotten bone. Am J Med Genet A, 2003; 120A(4): 583-587.
2. Szopinski KT, Adamczyk G, Drwiega M; Traumatic detachment of the inferior angle of the scapula in a 5-year-old boy—a sonographic diagnosis. Skeletal Radiol. May 2012; 41(5): 615–618.
3. May DA; Upper extremity trauma: scapula. In Manaster BJ, Disler DG, May DA editors; Musculoskeletal imaging—the requisites. 2. St. Louis: Mosby; 2002: 213–215.
4. Neviaser TJ; The anterior labroligamentous periosteal sleeve avulsion lesion—a cause for the anterior instability of the shoulder. Arthroscopy, 1993; 9(1): 17–21.
5. De Wilde V, De Maeseneer M, Lenchik L, Van Roy P, Beeckman P, Osteaux M; Normal osseous variants presenting as cystic or lucent areas on radiography and CT imaging: a pictorial overview. Eur J Radiol., 2004; 51(1): 77-84.
6. Hammond I, Sheikh A, Rasuli P, Souza CA; Vertebral pseudolesion on lateral chest radiograph. AJR Am J Roentgenol., 2008; 190(4): W240-W241.