



## Scapula Fracture as a Result of a Seizure

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### Abstract

This case report describes the presentation of a 30-year-old man status-post a first time seizure who presented with right shoulder pain. The initial diagnostic work-up was negative for any boney injuries. The physical exam findings prompted further imaging and the patient was found to have a comminuted and displaced right scapular body fracture. This injury occurred secondary to seizure activity, and is unusual in the absence of bone demineralization that would contribute to fracture risk.

### Clinical Image

A 30-year-old male with a past medical history significant for a resected brain tumor 4 months prior presented to the Emergency Department status-post new-onset seizure, noting complaints of headache and right shoulder pain. On examination he was not ill-appearing, had an improving post-ictal state, bite abrasion to the right side of his tongue and tenderness to palpation and ranging of his right shoulder, greatest posteriorly. No obvious trauma was noted. Complete right shoulder and right scapula radiographs, a non-contrast head CT and basic labs were obtained, followed by a CT of the right upper extremity with IV contrast.

### OPEN ACCESS

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Received Date: 06 Mar 2017

Accepted Date: 13 Apr 2017

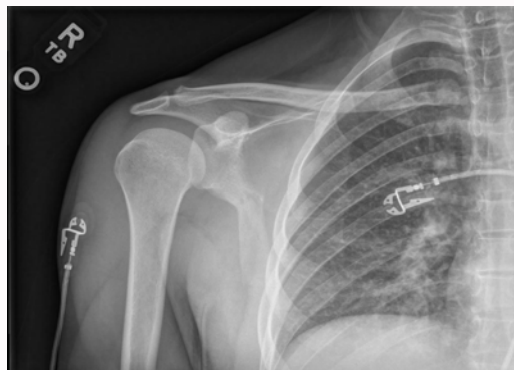
Published Date: 17 Apr 2017

#### Citation:

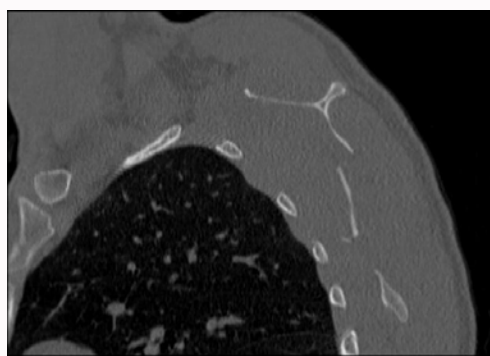
Hawk K, Bell D, Treiman MA. Scapula  
Fracture as a Result of a Seizure. *Ann  
Clin Case Rep.* 2017; 2: 1339.

ISSN: 2474-1655

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**Figure 1:** Glenohumeral and acromioclavicular joint showing normal alignment and suboptimally visualized fracture of the lateral and inferior scapula without significant degenerative changes.



**Figure 2:** Comminuted, displaced fracture of the scapular body inferior to the level of the scapular spine and glenoid.

Comminuted and displaced extra-articular inferolateral scapular body fracture caused by convulsive seizure. Classically, posterior shoulder pain with an inability to range the joint after a seizure is suggestive of a posterior shoulder dislocation [1-2]. Scapula body fractures are in general rare injuries and are indicative of significant direct, blunt force trauma [3]. There have been a small number of case reports of scapula fractures secondary to general epileptic seizures, however a large majority had associated bone demineralization that contributed to their fracture risk [4,5].

In this case, the initial radiograph was read as negative. The patient continued to have on-going pain, and a CT demonstrated the scapula fracture. The patient was admitted and treated non-surgically. Several months later he has regained most use of his shoulder.

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