The Occurrence of Bilateral Scapula Fractures due to an Epileptic Seizure

Shunichi Tobe, Kou Miyakoda, Izumi Kitagawa and Kiyoshi Miyahara

Key words: epileptic seizure, scapula fracture, humeral bone bruise

A 34-year-old healthy man with no significant medical history experienced a seizure for the first time which started with the stiffening of his right leg and thereafter progressed into generalized convulsion while he was playing computer games. Three weeks later, he experienced a similar seizure for the fourth time and was transferred to an ER. The test results of blood, cerebrospinal fluid, brain MRI, EEG and bone mineral density were normal. A diagnosis of focal epilepsy of focal to bilateral tonic-clonic seizure and due to an unknown etiology was thus made.

The patient continued to suffer from right shoulder pain. 3D CT of his shoulders revealed bilateral scapula body fractures (Picture 1). MRI also further revealed right proximal humeral bone bruises (Picture 2).

A 34-year-old healthy man with no significant medical history experienced a seizure for the first time which started with the stiffening of his right leg and thereafter progressed into generalized convulsion while he was playing computer games. Three weeks later, he experienced a similar seizure for the fourth time and was transferred to an ER. The test results of blood, cerebrospinal fluid, brain MRI, EEG and bone mineral density were normal. A diagnosis of focal epilepsy of focal to bilateral tonic-clonic seizure and due to an unknown etiology was thus made.

The patient continued to suffer from right shoulder pain. 3D CT of his shoulders revealed bilateral scapula body fractures (Picture 1). MRI also further revealed right proximal humeral bone bruises (Picture 2).

The frequency of bone fractures from epileptic convulsion ranges from 0.3-5.2% (1). Most vulnerable bones tend to be the humerus and vertebra. Bilateral scapula fractures have been reported in only four cases with renal osteodystrophy (2). This patient had scapula fractures with humerus...
bruises, presumably due to experiencing repeated vigorous epileptic muscle contractions.

The authors state that they have no Conflict of Interest (COI).

References
