Case	(141) Infrequent isolated trapezium fracture
Authors	M. Cegarra-navarro, M. Sánchez-robles, E. Alias-carrascosa, C. Ojados-hernández, M. Gutiérrez-sánchez, J. Soler-gutiérrez.
Centre	Hgu. Reina Sofia. Murcia.

CASE PRESENTATION

16 year-old male who goes to the emergency room for pain in his left hand after suffering a motorcycle accident. No medical or surgical history of interest. No chronic treatments. On examination, he presented pain on palpation in the anatomical tobacconist and hematoma at the base of the first finger.

Plain radiographs of the left hand showed a fracture of the trapezium. The study was completed with CT scans to assess the type of fracture and displaced fragment and to rule out other associated fractures.

The patient was immobilized with a scaphoid splint and surgery is performed after 6 days. Osteosynthesis is performed with a 16x2.5 Skeletal Dynamic compression screw, with good subsequent evolution.

DISCUSSION

Trapezium fractures account for <5% of all carpal fractures. Of these, about 20% are vertical sagittal split fractures occur rarely in isolation. The clinical findings are usually minimal, with no gross deformity, and almost full range of movements of the wrist and fingers (1-5).

Only the terminal range of opposition of the thumb is usually impaired. The fractures of the body of the trapezium are classified into five types based on the articular surface involved (1) .

Trapezial body fractures are difficult to detect on routine radiographs because of the overlap by the trapezoid shadow. If it is not seen in standard radiology, additional projections (carpal tunnel or Robert´s view) should be requested. In most cases, CT scans are performed to assess the type of fracture and displaced fragments.

Different authors reported lesions associated such us fracture of the proximal pole of the scaphoid, fracture of the thumb metacarpal, fracture of the distal radius, fracture of other metacarpals and fracture of other carpals (2).

However, there are few published cases of isolated trapezium fracture. These fractures should be diagnosed early because must be reduced and fixed to prevent stiffness of the carpo-metacarpal joint.

CONCLUSION

In case of clinical suspicion of trapezium fracture, if it is not seen in standard radiology, additional projections and in many cases CT should be requested to allow early diagnosis and treatment.

Anteroposterior radiograph of the wrist showing the fracture of the trapezium. CT scan and 3D reconstruction CT scan showing a major volar fragment (arrow).

BIBLIOGRAPHY

- Walker JL, Green TL, Lunseth PA. Fracture of the body of the trapezium. J Orthop Trauma 1988; 2:22-8.

- Suresh S. Isolated coronal split fracture of the trapezium. Indian J Orthop. 2012; 46: 99-101.