



Treatment and Evolution of Galeazzi Fractures

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ABSTRACT

Galeazzi fracture involves a fracture of the radial shaft and a distal radioulnar dislocation (RCD). RCD lesions are almost always associated with isolated fractures of the radius. They often go unnoticed and their ignorance strike prognosis, because disorders pronosupination and the potential impact on the entire wrist. It was described by Sir Astley Cooper in 1866 for the first time. Judet in 1913 and in 1929 Schneck also described this injury but it is only since 1934 following the publication of 18 cases by Ricardo Galeazzi lesion that bears his name. This fracture is rare and only occurs in 6.8% of fractures of the forearm according to the review of 1934 fractures Moore.

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Introduction

Materials and methods:

This is how we try, through a retrospective study of 24 to analyze the management of this lesion in our context, and evaluate our therapeutic results in the light of recent data from the literature. Our retrospective study included 24 cases of Galeazzi fracture dislocations collected in the trauma-orthopedics at the University Hospital of Rabat Avicenna between 2005 and 2011. Demonstrate the seriousness of the injury which is rare because it often goes unrecognized and was intended to diagnosis is made for isolated fracture of the radius.

Results:

The average age was 33 years with extremes ranging from 25 years to 62 years. The male was predominant. Etiologies were dominated by traffic accidents (60%) followed by assaults and accidents (20%). The right side was predominant (60%) The anatomo-radiological predominant type of fracture-dislocation of Galeazzi was the type III (15cas), followed by type II (4cases) and equivalent to Galézzi (3 cases) and type I (2 cases). The surgical treatment was in all cases:

Fixing a screw-plate was made for all fractures due the radial shaft

-For lesions of the distal radio-ulnar joint Closed fireplace plug percutaneous distal radio-ulnar in 19 cases. Closed reduction with cast immobilization for 6 weeks in 5 cases home. The results evaluated according to the criteria MICKIC were good in 17 cases

Discussion:

Described by Galeazzi in 1934 18 cases, it was already known Astley Cooper in 1812 and was described by Darrach in 1912 and Milch in 1926. Le most likely mechanism is a fall on the palm of the hand with an extension of wrist, and a forced pronation of the forearm. The forces are transmitted to the wrist, thereby producing a fracture of the radial shaft at its pronatrice curvature and a torn ligament triangular.

Galeazzi fracture derives its gravity above the distal ulnar dislocation radio, because of its frequent disregard delaying treatment and instability which affects the pronation - supination. (1-2)

Palmer and Werner had introduced the notion of complex distal triangular or TFCC (Triangular Fibro- Cartilage Complex)

to designate all ligamentous and cartilaginous structures that secure the distal part of the ulna to the radius. This complex consists of the triangular ligament that only occurs in the damping phenomena, and two front and rear reinforcements involved in stability, also called "radio - ulnar ligament anterior and posterior." These lesions of the TFCC (triangular distal Complex) Untreated RCD sources of instability resulting in a painful wrist syndrome, decreased grip strength, and limitation of pronation - supination. (3-4-5)

For Milliez and Thomine and Scott reaching the articulation RCD is practically constant in isolated radial shaft fracture, especially if the fracture seat at the junction of the middle third and distal third. Indeed, since the publication of Galeazzi in 1934, the nosology of these fractures has grown considerably and intraoperative arthrography of the wrist was systematically recommended before any isolated radius fracture without apparent injury to the distal radioulnar. Mansat et al classified this lesion according to the severity.

The diagnosis of the lesion of the third degree (dislocation RCD) is clinically and radiologically evident if X-rays are focused on ARCD both face in profile. Posterior dislocation variety of RCD is dominant in all series. Indeed, during the hyperpronation the ulnar posterior luxury laterally due to the rupture of moorings its sheath radius, resulting in a shift of the ulnar head back. Arthroscopy is more efficient than arthrography in the evaluation of lesions of the wrist (2-6-7)

The treatment of unstable fractures of the RCD in Galeazzi is definitely surgical. It should aim for the restitution of normal function, particularly pronation -supination and restoring normal length and curvature of the radial shaft. The approach taken by the authors is common reduction of the radial fracture often leads to reduction of the dislocation RCD Closed fireplace. If the reduction is obtained, it will be maintained by a radio - ulnar plug protected by a plaster (3-4 weeks) or only with cast immobilization in supination (4-6 weeks).

The irreducibility of the ulnar head is either due to the interposition of the posterior ulnar tendon or ligament is sometimes triangular extensor tendon of the fifth finger. The reduction must in this case be Blood. (8-9)

Conclusion:

The Galeazzi fracture-dislocation is a rare injury, its diagnosis is often initially unknown, is drawn in isolated fractures of the radius say Real-emergency thérapeutique -The prognosis of Galeazzi fracture depends mainly on the initial treatment of lesions of the distal radio-ulnar joint which require for their diagnosis and careful clinical examination a good radiological analysis.



Figure 1: Galeazzi fracture

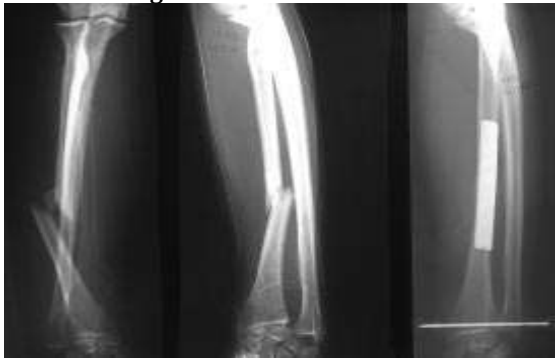


Figure 2: Galeazzi fracture: radial plate ulnoradiale pin.

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	Excellent if all of the following signs	Middle if one or more of the following	Bad if one or more of the following signs
Consolidation	Par	Delay	Pain Nonunion
Alignment	Perfect	Slight defect	Deformation of the forearm
Shortening	0	Minimal	Important or angulation
Joint RUD	0	Subluxation	Dislocation
Pronosupination	Par	Limited but exceeds 45 °	Limited to less than 45°
Our results	17	4	2