

# Fracture of the coracoid process associated with fractures of the acromion and the distal clavicle: a case report

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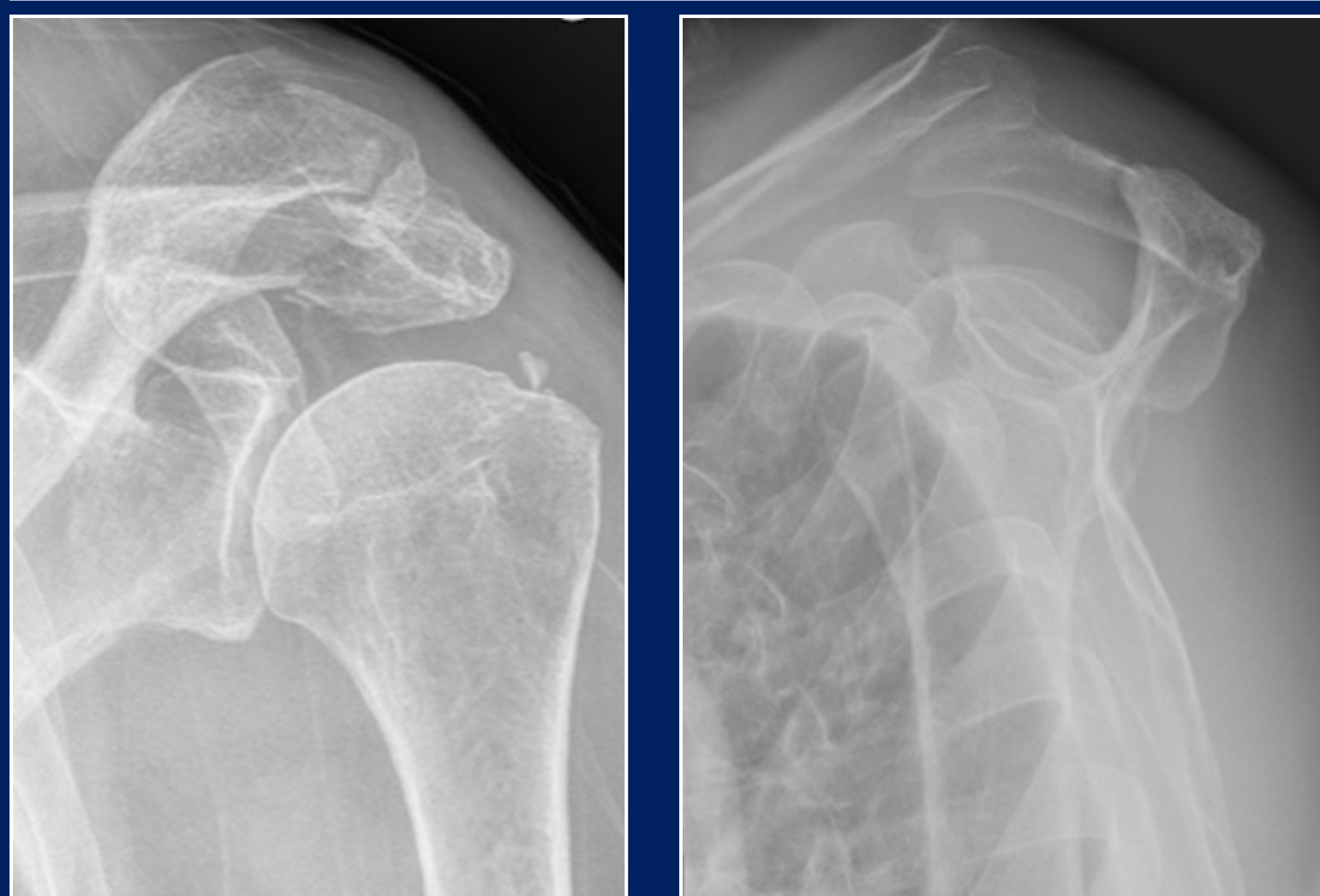
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## INTRODUCTION

- 1993 : The **superior shoulder suspensory complex** : ring composed of the glenoid, the coracoid process, the coracoclavicular ligaments, the distal end of the clavicle, the acromioclavicular junction and the acromion (Goss)
- 1997 : **rupture** of the shoulder suspensory complex in **two places** resulted in an **unstable** lesion (Goss)
- **Fractures** of the **coracoid process** and the **acromion** are **very rare** (3 to 7% of scapula fractures, themselves representing 1 to 3% of all fractures)

We report a case of **fracture of the coracoid process associated with a fracture of the lateral third of the clavicle and acromion** in a 54-year-old patient.



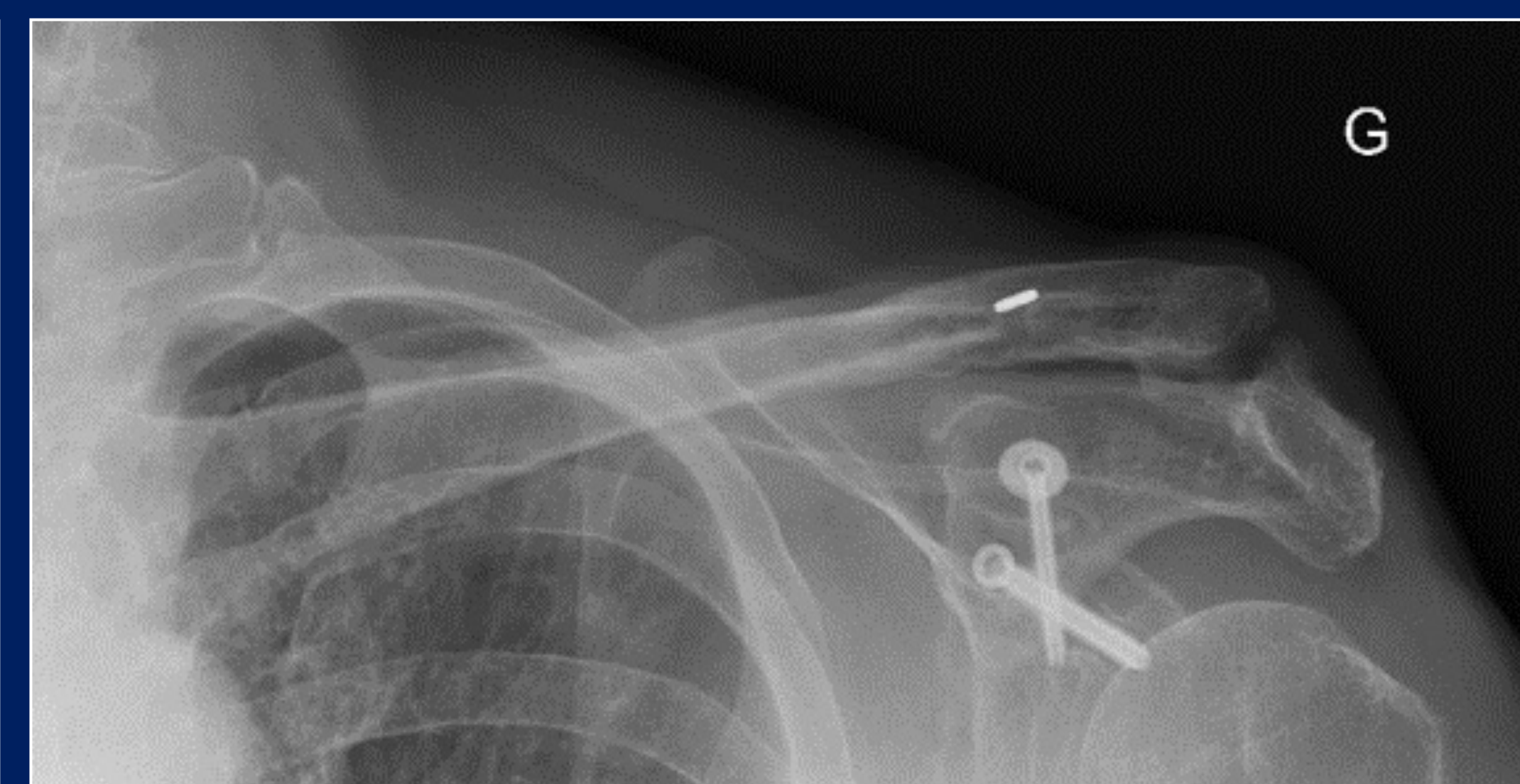
3D recon-CT, AP and Neer x-rays showing distal clavicle fx, acromion fx and coracoid process fx

## METHODS AND MATERIALS

### Surgical technique :

- Step 1 : posterior approach, ORIF of the acromion with Aptus Hand and Aptus Elbow plates
- Step 2 : sabercut approach / MIPO (medial screws), ORIF of the distal clavicle with 3 Aptus Elbow plates
- Step 3 : neutralization of the forces on the coracoid process : Endobutton transglenoidal – distal clavicle
- Step 4 : ORIF of the coracoid process with 2 cannulated screws (2.8 mm and 4.0 mm)

The patient has been followed up with radio-clinical controls at 6 weeks, 3 months, 6 months and 9 months.



AP/tang x-rays 6 weeks post-op

6 weeks post removal of hardware

## RESULTS

- Almost complete mobility 6 weeks after surgery
- No pain
- At 6 months, partial hardware removal due to plate irritation, and coracoid screws change on stable pseudoarthrosis
- 3 months later, the patient reported no pain and was relieved. He regained very good ROM. No radiological changes neither acromioclavicular joint nor coracoid



## CONCLUSIONS

Goss showed in 1997 that damage to the shoulder suspensory complex in two places represents instability. The **surgical technique** that we propose seems to give **good clinical results** and could be useful in the management of these rare and complex lesions.

## REFERENCES

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