

## Clinical Image

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# Rare case of femoral shaft fracture in osteopetrosis

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### Introduction

First described by Albert Schonberg in 1904 [1], osteopetrosis is a group of sclerosing bone dysplasias characterized by generalized skeletal densification due to decreased osteoclast mediated resorption [2].

The management of fractures in this patient population is unique. Centromedullary nailing cannot be used in the vast majority of cases because of a narrow canal. Thus, Open Reduction And Internal Fixation (ORIF) remains the most suitable method in these patients [3].

### Visual case discussion

A 18 years old patient, suffering from osteopetrosis with ce- city and bone marrow deficiency, was admitted to the emer- gency room of the Ibn Sina University Hospital in Rabat for a mid-shaft fracture of the right femur following a minor fall on the thigh.

The clinical examination revealed a patient with functional impotence of the right lower limb; a deformity of the thigh; the examination of the hip and knee was normal. The pulses were well perceived and there was no sensory-motor deficit.

On standard radiography, a femoral shaft fracture with med- ullary canal insufficiency and generalized bone density increase was observed.

The patient was admitted to the operating room where he underwent surgical management by ORIF. The postoperative follow-up was simple.

### References

1. Albers-Schonberg HE. Rontgenbilder einer seltenen Knochen- krankung. Munch Med Wochenschr. 1904; 51: 365-368.
2. Marks SC. Pathogenesis of osteopetrosis in the rat: Reduced bone resorption due to reduced osteoclast function. Am J Anat. 1973; 138: 165-178.
3. Hao Yang , Guo Xi Shao , Zhen Wu Du , Zheng-Wei Li, et al. Treat- ment for subtrochanteric fracture and subsequent nonunion in an adult patient with osteopetrosis: A case report and review of the literature.



**Figure 1:** Preoperative radiographic images showing the femur fracture with increased bone density.



**Figure 2:** ORIF is the most suitable method.