

# Floating Knee And Patellar Fracture: A Case Report



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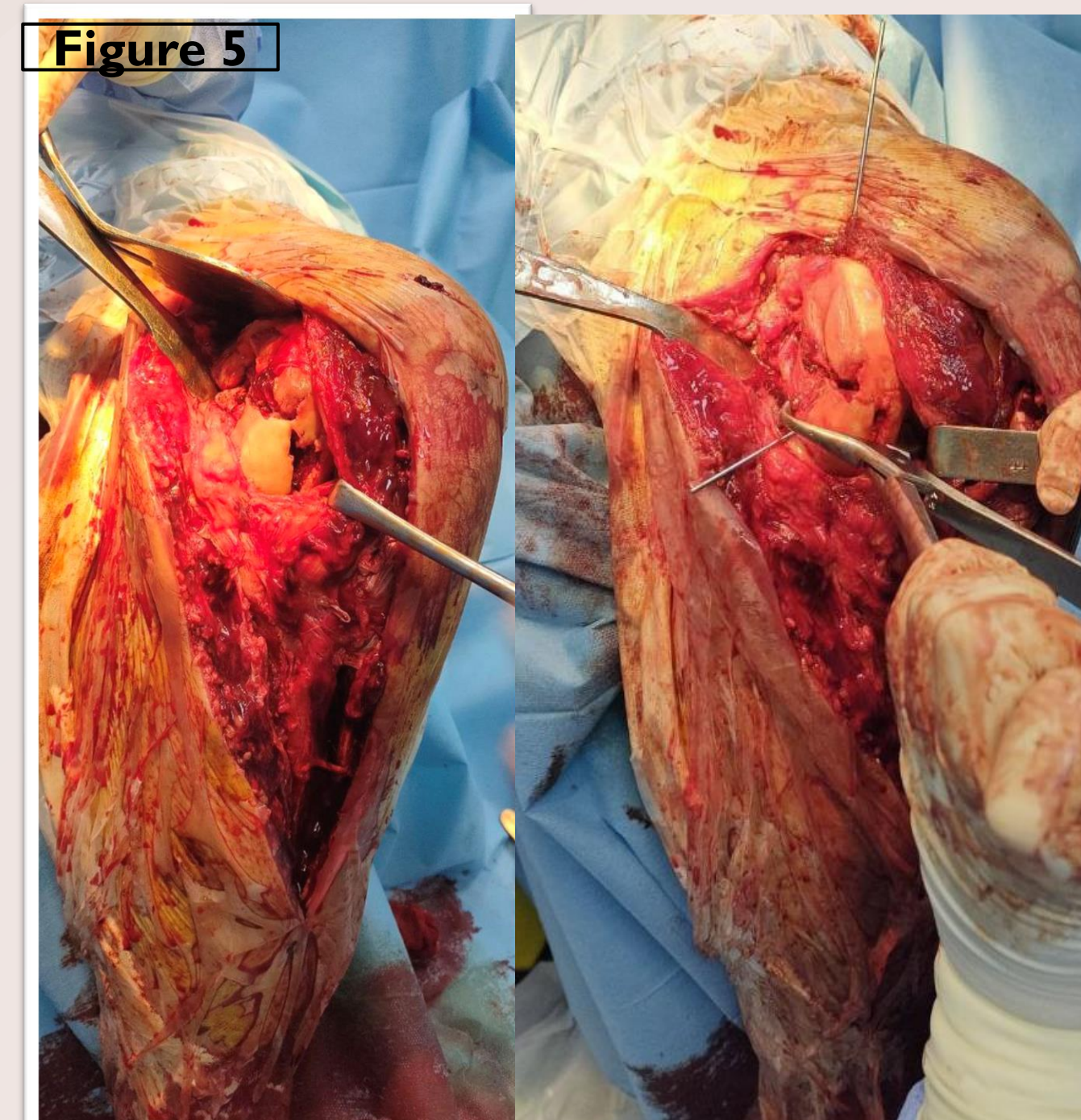
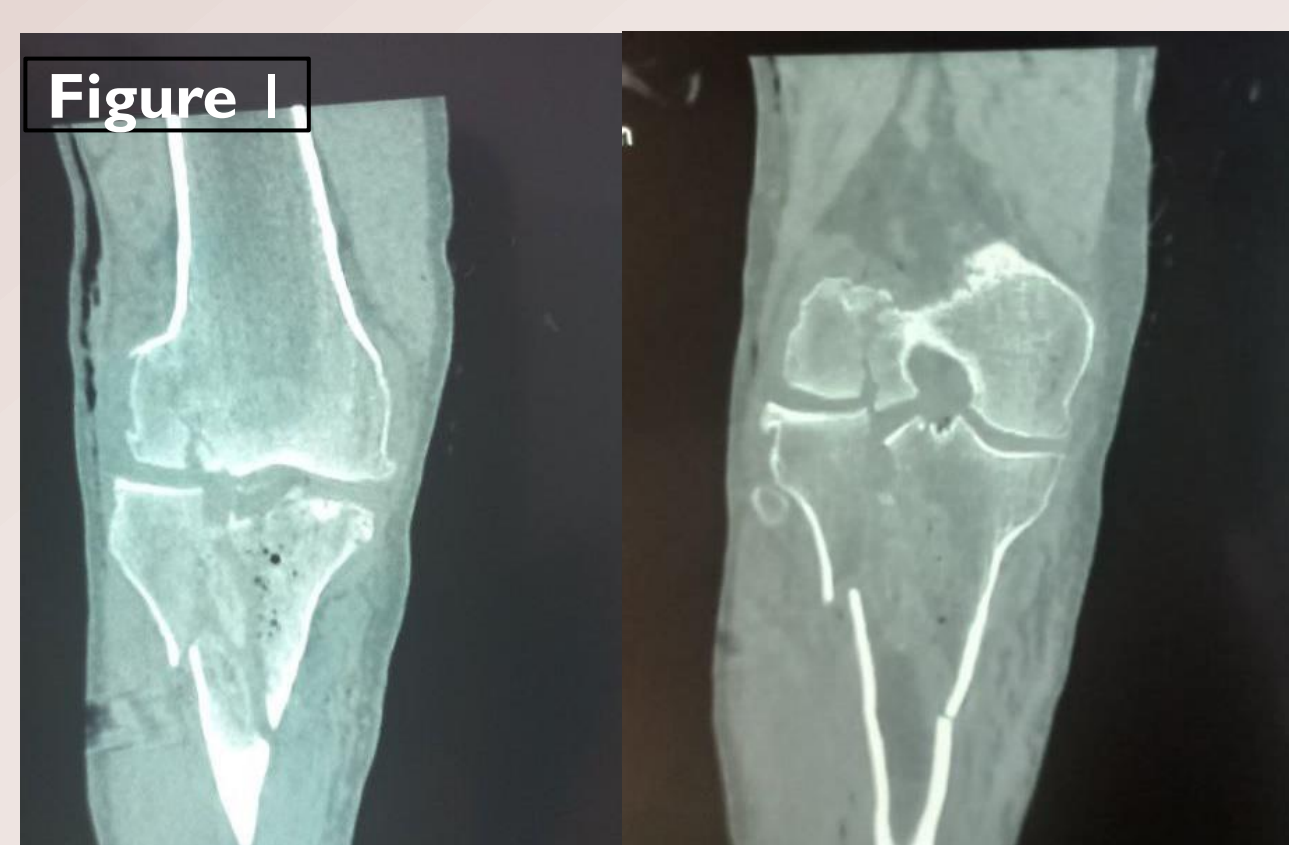


## INTRODUCTION

The association of a patellar fracture and an ipsilateral floating knee is a rare injury with no description in literature therefore no treatment guidelines are established. We aim to evaluate the clinical and radiological outcomes of surgical treatment in a patient with this injury.

## MATERIAL AND METHODS

We present a case of a 50-years-old polytrauma patient who sustained a closed knee injury following a car accident. The patient underwent surgical intervention and postoperative outcomes were assessed using the International Knee Documentation Committee (IKDC) score. A literature search was conducted on PubMed.



## ANALYSIS AND DISCUSSION

The rarity of this combined injury rises unique challenges in terms of treatment planning. The likely mechanism of injury is a dashboard-type mechanism, resulting in multiple fractures around the knee joint. The optimal sequence of fracture fixation and the choice of surgical approach are subject to debate. No articles discussing this matter were found.

Our approach of addressing the femoral and tibial fractures first, followed by the patella all by one approach, allowed for stable fixation of the articular surfaces. No evidence of codified strategy is found.

Also the management of the post operative period is unclear, since we are facing a combination of three highly arthrogenic periarticular lesions which requires anatomic reduction, rigid fixation, and early rehabilitation.

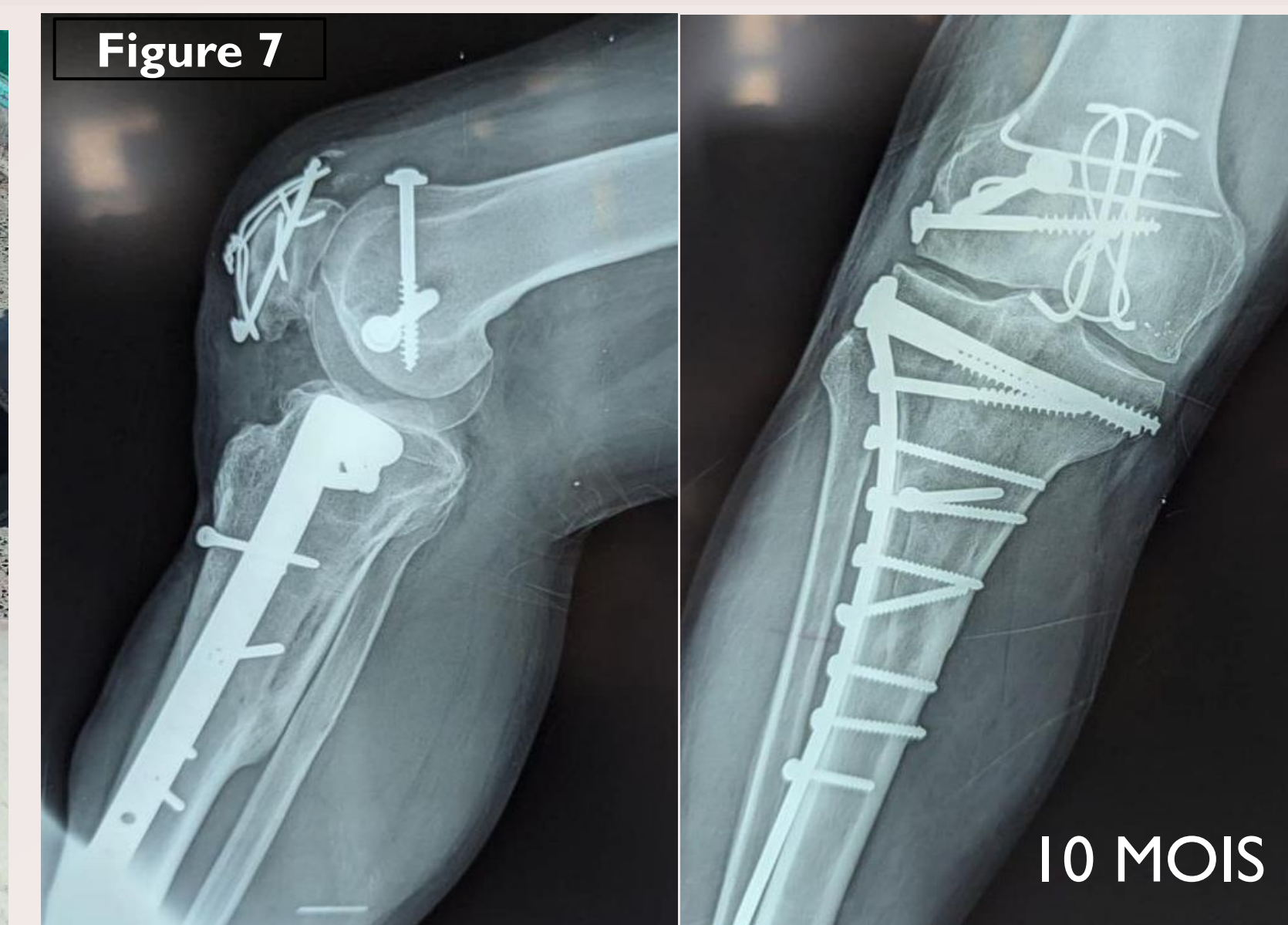


Figure 9 Score IKDC	
RÉSULTATS	
Symptômes	30 /37
Activités sportives	33 /40
Fonctionnement	8 /10
<b>TOTAL</b>	<b>81.61 /100</b>

## RESULTS

The patient presented with a closed knee trauma with no vasculonervous complications. Imaging showed patellar fracture BII according to MOULAY and RICARD, a lateral femoral condyle fracture B1 according to AO, and a tibial tuberosities fracture SCHATZKER type VI (fig 1,2,3) ; witch corressponds to type IIIB according to modified FRASER classification of floating knee. Surgical treatment used a lateral parapatellar approach (fig4) for sequential fixation of the lateral femoral condyle with screws then tibial tuberosities with an L inversed plate and then the patella with a tension band wiring (fig 5,6) .At the 10-month follow-up, radiological union was observed for all fractures (fig7). He achieved 81 according to the IKDC score witch is a good functional outcome (fig 8,9). The patient declare being satisfied with the result and went back to work .

## CONCLUSION

The association of a patellar fracture and a floating knee represents a complex orthopedic injury , yet no reviews were found .Although our case demonstrates favorable outcomes with the chosen treatment strategy. Further studies are needed to establish evidence based guidelines for the management of such cases.