

INTRAMEDULLARY NAILING OF THE SHAFTS OF BOTH FEMURS AND TIBIAS IN A PATIENT WITH PULMONARY CONTUSIONS

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BACKGROUND - AIM :

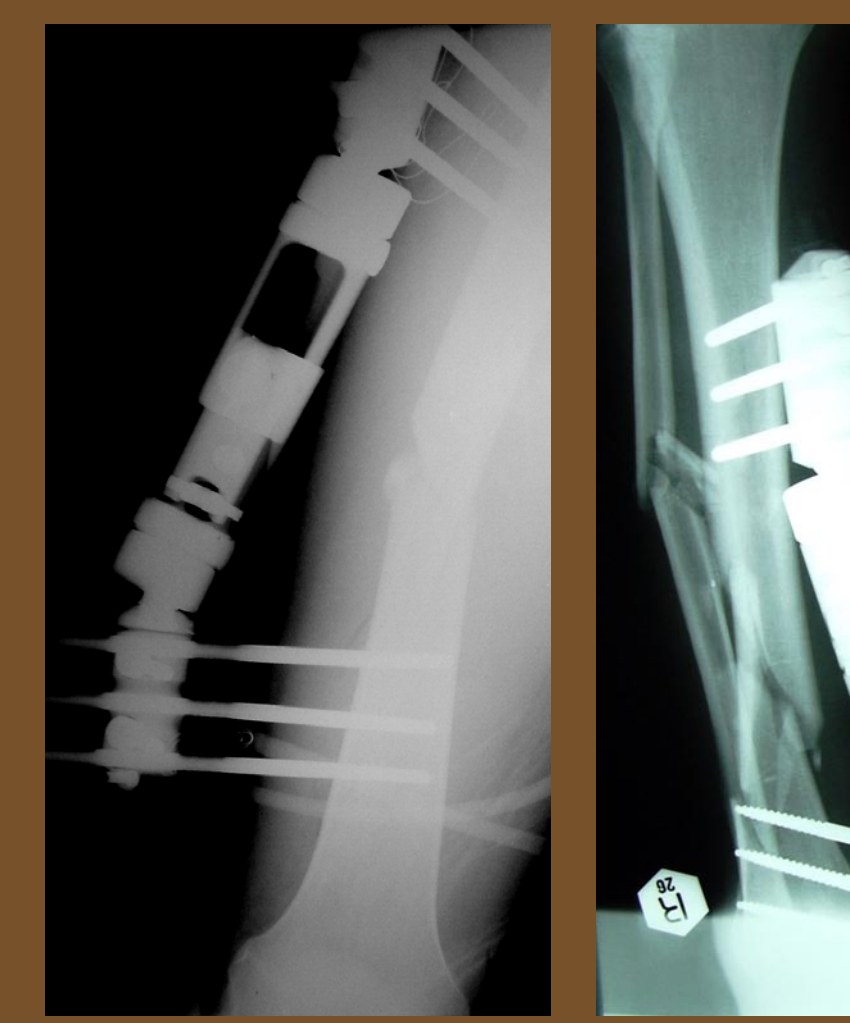
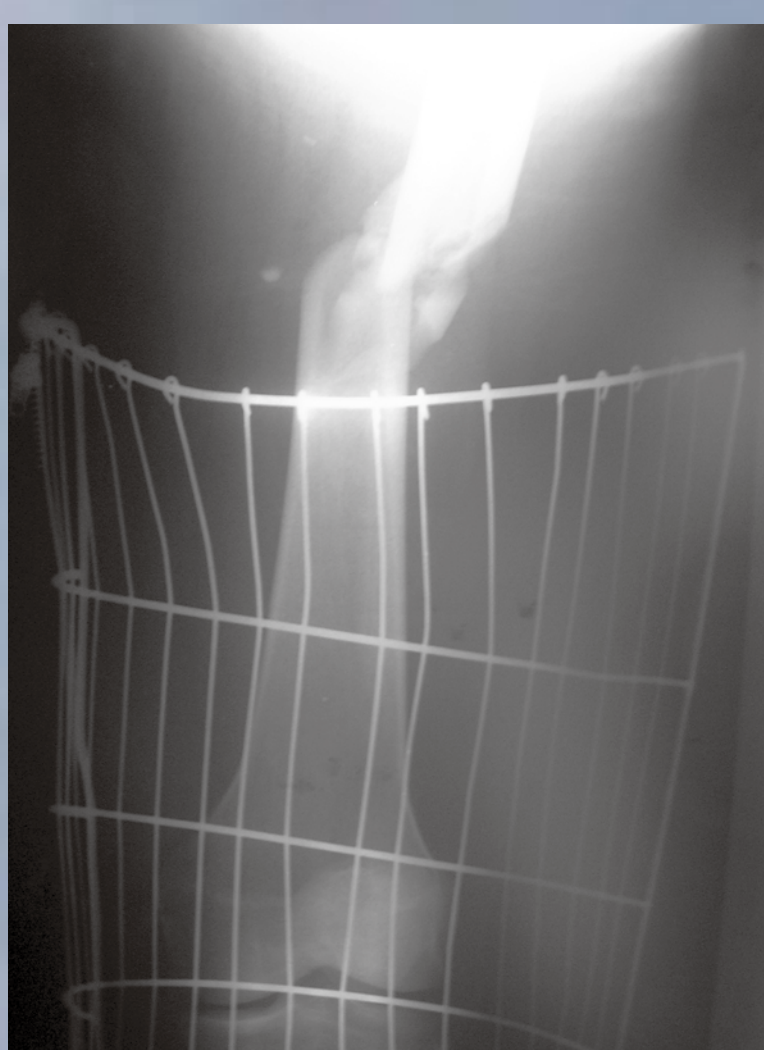
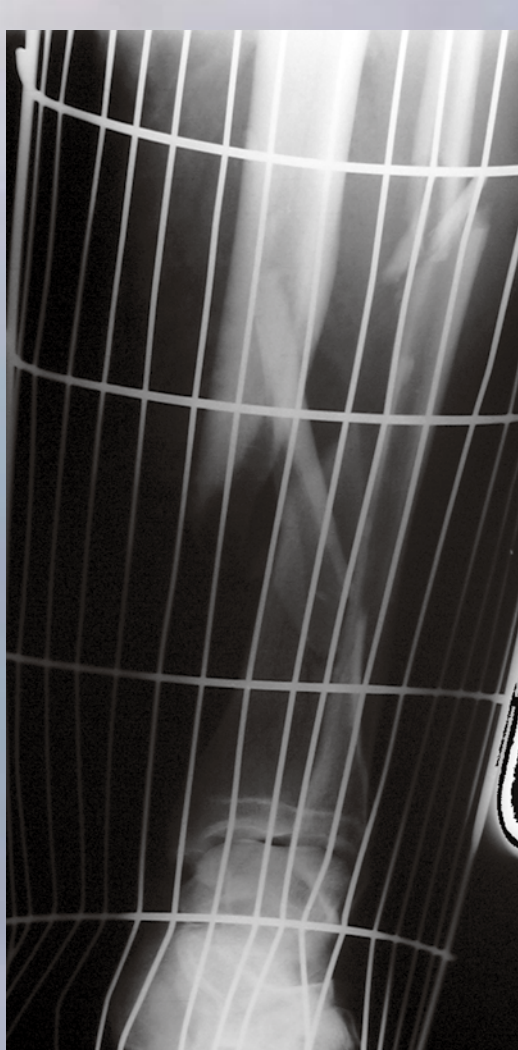
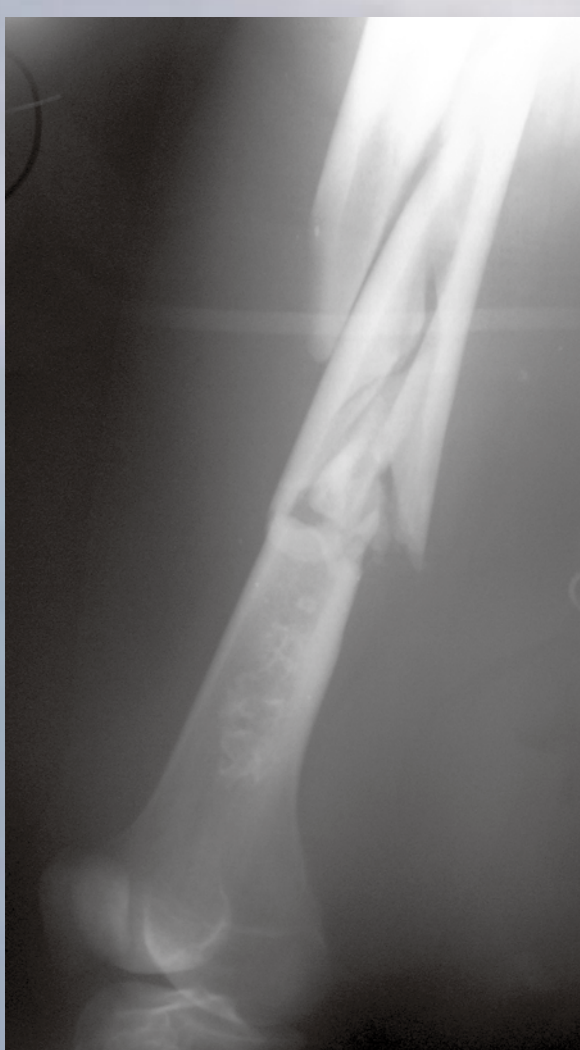
Intramedullary nailing is considered to be the method of choice for extra-articular fractures of the shafts of the lower limbs. Limitations exist concerning the risk of pulmonary embolism (especially during the reaming procedure and the insertion of the nail). In this paper we present the treatment of a patient with bilateral floating knees by the use of four intramedullary nailings of the lower limbs.

MATERIAL & METHODS : These are the clinical and radiological findings of a 22 years old MVA multitrauma patient on admittance day :

1. Left femoral fracture 2.Open (3B) fracture of the right tibia 3. Right femoral fracture 4. Right olecranon fracture

Other findings :

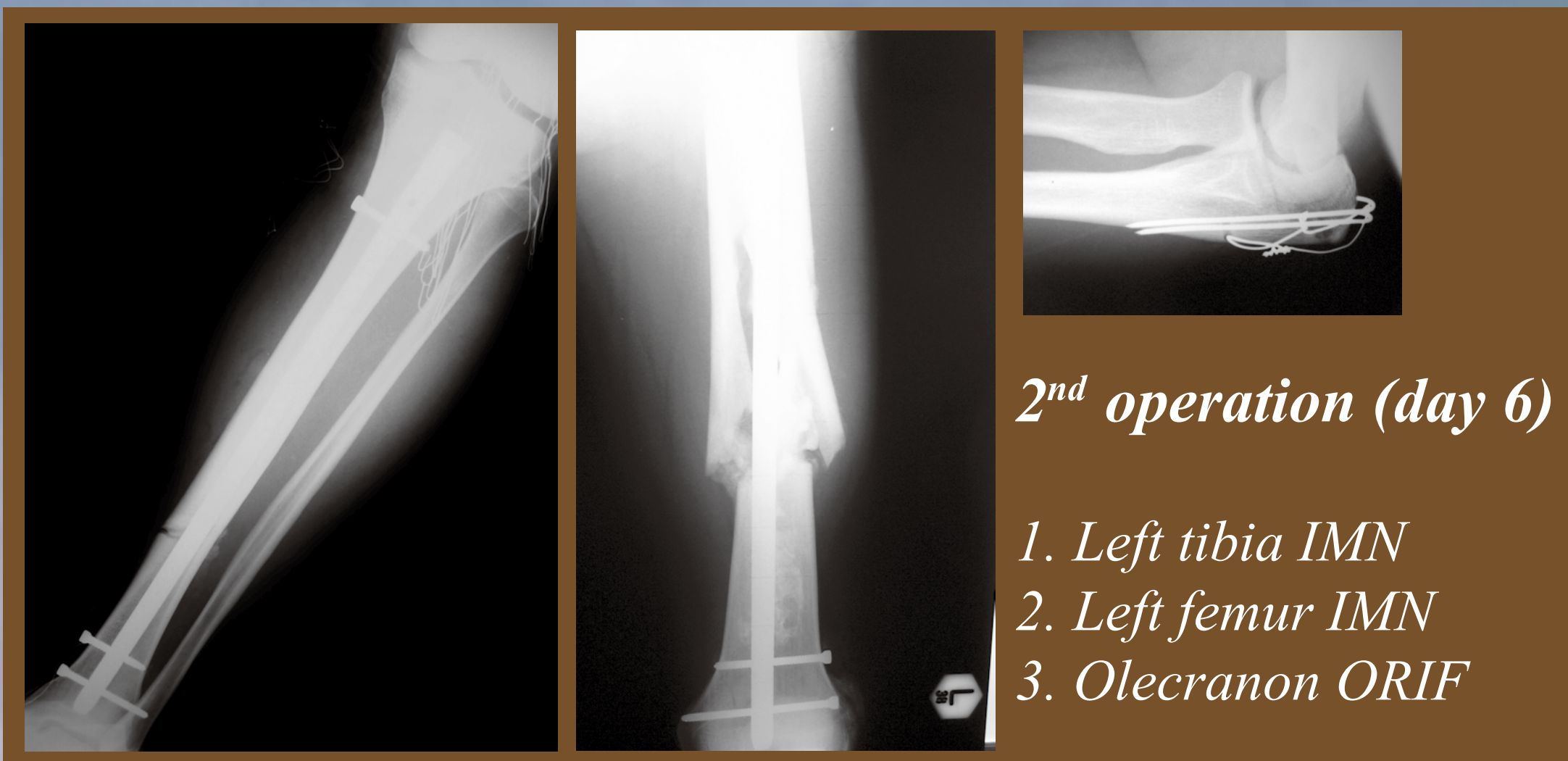
- Bilateral pulmonary contusions
- Transvere spinal processes fractures L2-L4
- Non-displaced right sacral bone fracture



1st operation (day 1)
External fixation of the right femur & tibia

- On admittance day the patient was operated urgently. External fixators were placed on the right femur and the right tibia .The wound of the 3B open fracture of the right tibia was sutured after thorough surgical debridement and lavage. Skeletal traction was used to immobilise the left femur .

- The patient remained haemodynamically stable the next days. A new lung CT on the 5th day showed healing of the pulmonary contusions. The next day (6th day) the patient was transferred to the operating theater for the second time. During the preparation and the placement of the patient on the surgical table for the fixation of the left femoral fracture, a non displaced fracture of the left tibia was clinically revealed. Intramedullary nailing fixation of the left femur and the left tibia were held sequentially and internal fixation of the left olecranon fracture took place, as well.



2nd operation (day 6)

1. Left tibia IMN
2. Left femur IMN
3. Olecranon ORIF

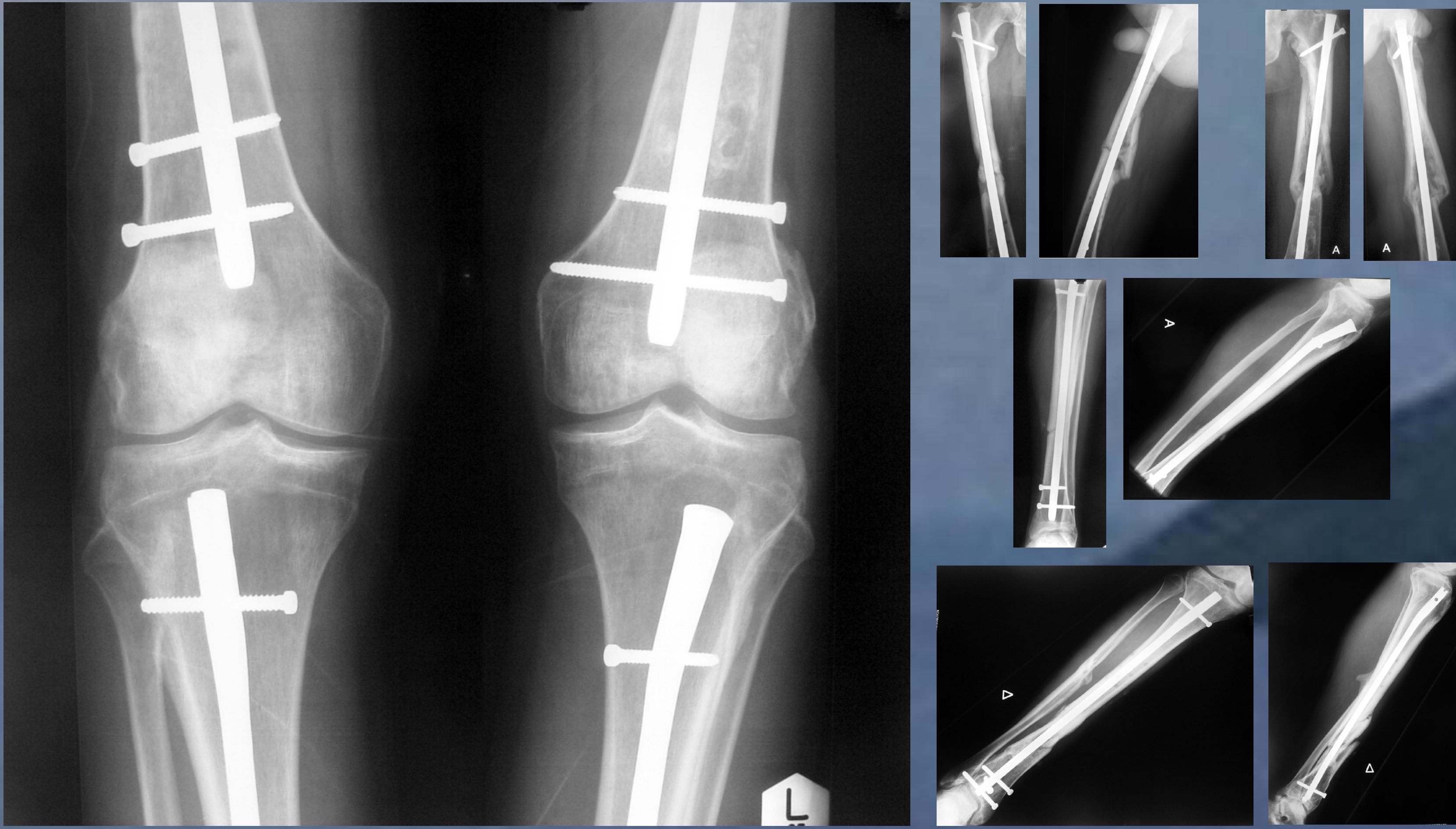
- On the 12th day and since the wound of the right tibial open fracture had healed without signs of infection, the patient was operated for the 3rd time . The external fixators of the right femur and tibia were removed and intramedullary nailing fixation was performed during the same surgical procedure. All four nailing fixations were conducted by the use of proximal and distal locking .



3rd operation (day 12)

1. Right tibia IMN
2. Right femur IMN

- The ticket of realease was given after a period of 30 days of hospitalization. The postoperative period was free of any complications. Two months after the last operation the patient was able to walk with the aid of scrutches and four months postoperatively full weight bearing was achieved. After six months all the patient's fractures show full callus formation and bridging .



DISCUSSION :

Up to our knowledge there is no similar case in the literature with bilateral floating knees in which four intramedullary nailing operations took place.The operations were performed in two surgical times in order for the patient's clinical condition not to be too much aggravated. Damage Control Orthopedics principles were followed. In the case of multitrauma patients assiduous clinical and radiological control is essential. Minor lesions may be left unrecognized because of the presence of numerous & obvious injuries.

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