Ортопедический контроль повреждений при политравме

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Damage control orthopaedics

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INTRODUCTION

Emergency procedures aimed at rapid reduction and fixation and spanning of periarticular fractures has been termed “damage control orthopaedics”. In severely injured patients, early definitive fixation of fractures may not be appropriate. Recent studies showed that in multiple trauma, DCO is the best option for management of patients who are unstable and in extremis. The paper presents a case of such a control in a 34-year-old patient who sustained polytrauma on 20.10.2016. Primary medical care was conducted at a local hospital. Ten hours after the injury, the patient was transported to the Bari-Ilizarov orthopaedic centre for further management. On admission, he was in a traumatic shock. Radiographic study showed a comminuted fracture of the left femur, medial condylar fracture of the ipsilateral femur, comminuted fractures of both bones of the shin, left wrist sprain, and contusion of the head. Osteosynthesis of the left femoral shaft was performed with a Kuntscher nail and additionally with the Ilizarov fixator. When patient’s condition stabilized on the next day, osteosynthesis of the tibia was performed with the Ilizarov apparatus and the wrist was fixed with a plaster cast.

Keywords: polytrauma, femur, shaft, tibia, fibula, wrist, fracture, Kuntscher nail, Ilizarov apparatus
CONCLUSION

ETC and DCO have their place in the management of multiple trauma patients. Comprehensive resuscitation is mandatory for improving end-organ hypoperfusion.

Case presentation

Patient M. H., 34 years old male, sustained an injury on 20.10.2016 at 11:00 am in Bogra district, 205 km from Dhaka. He was taken to Bogra Medical College Hospital where he got primary management by plaster and antibiotics and 2 units of blood (900 ml). Then, he was referred to Dhaka for better management. I received the patient at my BARI-ILIZAROV ORTHOPAEDIC CENTRE, Dhanmondi, Dhaka at 09:00 pm. After the proper anamnesis had been taken, I did all investigations accordingly. Then, the patient was taken to OT for further management. X-rays showed:

1. Comminuted shaft fracture of the left femur;
2. Medial condylar fracture of the ipsilateral femur (was found by fluoroscopy in OR);
3. Comminuted fracture of the left tibia with comminuted fracture of the left fibula G IIIA;
4. Left wrist sprain;
5. Contusion of the head.

The patient was in a shock. BP was: 70/60 mm of Hg. Pulse was 140/minutes. 2 units (900 ml) of blood was transfused per operatively and 2 units (2 liters) of Hartmann’s Solution (Sodium Chloride: BP 0.6 % w/v, Potassium Chloride: BP 0.04 % w/v, Calcium Chloride: BP 0.027 % w/v, Sodium Lactate: USP 0.32 % w/v) intravenously infused.

Fig. 1. Damage control in a 34-year old patient with polytrauma: a) the patient 10 hours after injury in my consultation room; b) comminuted fracture of the left femoral shaft; c) comminuted fracture of the left tibia with comminuted fracture of the fibula G IIIA; d) external view of the left knee and leg in OR; e) after elastic stabilization with Ilizarov wire management of tibia and femoral condyle with Ilizarov fixation in OR; f) osteosynthesis of the femoral shaft fracture by Kuntscher nail, augmented by half ring fixation; g) next day (21.10.2016) at 08:00 am in the morning, clinical condition of the patient was totally good. Plaster was applied in the left forearm and hand; h) clinical appearance of the patient during dressing in OR; i) next day during dressing in OR; j) radiographic view, fixation of femoral shaft and condyle by Kuntscher nail, augmented by Ilizarov fixator; k) radiograph of tibia and fibula fixation with the Ilizarov apparatus (AP view); l) radiograph of tibia and fibula fixation with the Ilizarov apparatus (lateral view)
Литература


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