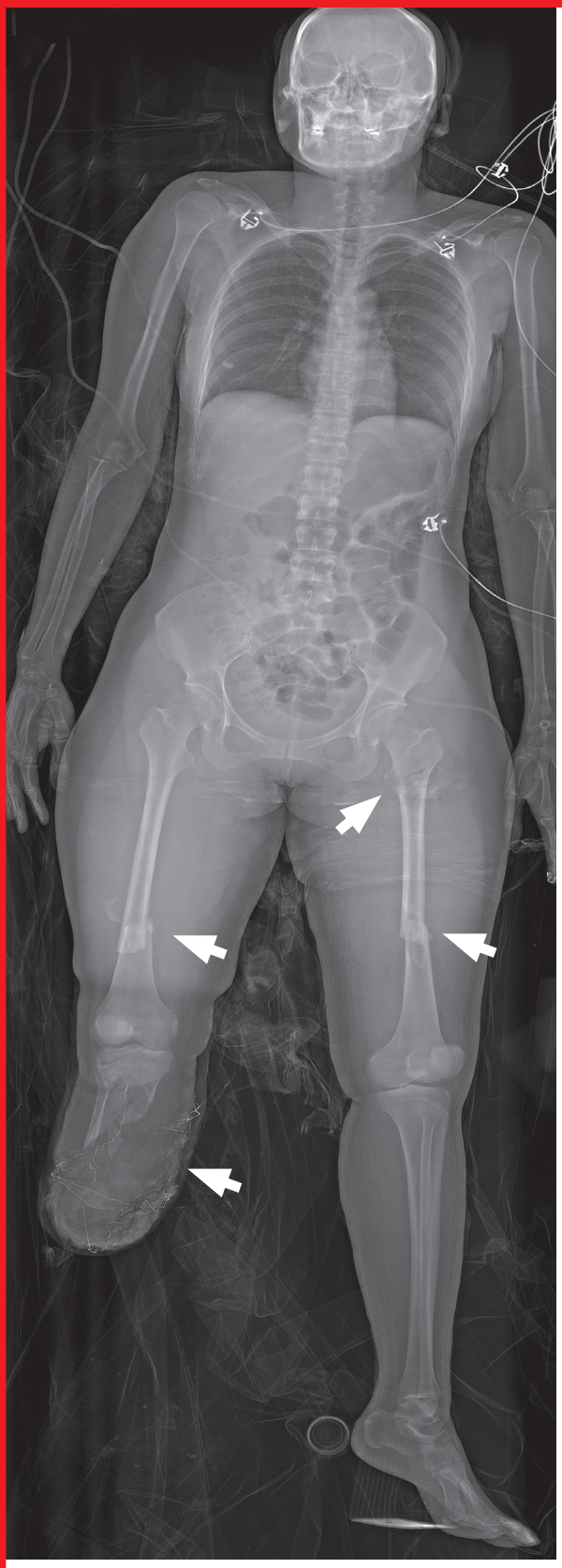
The use of Lodox in evaluating the injuries of an RTA patient.



A case study from the Emergency and Trauma Centre, Rashid Hospital, Dubai.

This centre is a Dubai Health Authority (DHA) facility accredited by Joint Commission International.

Introduction

The unintended collision of one motor vehicle with another, a stationary object, or person, resulting in injuries, death and/or loss of property is referred to as Motor Vehicle Accident (MVA) or Road Traffic Accident (RTA)[1].According to WHO, 3000 people die on the world's roads every day and several million are injured or disabled each year. Road accidents cost governments in different economies[2] approx $600 billion per year. According to Dubai Police statistics, there is 154 traffic related deaths per annum,[3] 1 death and 8 injuries per day in Dubai and 20 deaths per 100,000 population (compared to 6 per 100,000 for the UK and Sweden)[3] . This public health problem puts a huge burden on the medical system to provide efficient management.

Case Presentation

A 32 year old, female patient was transferred to the Emergency and Trauma Centre by ambulance following an RTA. The patient presented with multiple wounds and complaints of pain in both legs. She was hemodynamically stable with a blood pressure of 116/83 and pulse of 110 bmp. She was fully conscious with Glasgow Coma Score of 15/15. Chest examination revealed bilateral equal air entry. Physical examination revealed a tender abdomen, below knee amputation on the right side with deformity and tenderness of the left thigh.

Imaging, Diagnosis and Treatment

Lodox full-body AP X-ray was obtained followed by a trauma CT. The Lodox images revealed; traumatic amputation of the patient's right leg at the level of the proximal shaft of the right tibia and fibula and comminuted displaced fractures at the mid-shaft of the left femur and distal shaft of the right femur. Vertebral body heights, disk spaces and alignments of the entire vertebral column are preserved. Both lungs otherwise appear clear without detectable contusion or any hemopneumothorax. The CT images revealed a fracture of the neck of the left femur. The patient was immediately transferred to the operating theatre to undergo bilateral external femur fixation, debridement and stump closure for right leg below knee amputation. Postoperatively, the patient was admitted and scheduled for further surgeries to remove the external fixators and place femur nailing.

Discussion

The value of incorporating a rapid full-body X-ray imaging tool into any polytrauma management is clearly demonstrated in this case. Imaging adjunct to the primary survey enabling a full body overview and diagnosis in 13 seconds is of essence in the golden hour. In this case with traumatic amputation and severe bleeding, it is imperative to outrule all other injuries before shifting the patient to theatre. Lodox full-body imaging provides the required imaging as per primary survey and more, offering in this case the capability to accurately identify the location and severity of all lower extremities fractures and amputation site.

Conclusion

Lodox is a valuable diagnostic tool for patients with multiple fractures and traumatic amputation presenting to any emergency department.

"Lodox enables a quick overview of all injuries associated with RTA patients"

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