

TO ASSESS THE APPROPRIATENESS OF RADIOLOGICAL INVESTIGATION IN PAEDIATRIC MAJOR TRAUMA PATIENTS WITH SUSPECTED CHEST INJURY

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Introduction: Significant injuries due to blunt trauma raise major clinical concern. Due to their rarity, lack of experience in managing such cases and application of adult protocols, children are frequently investigated using CT scanning. In an attempt to reduce the radiation exposure of such children The Royal College of Radiology (RCR) produced an evidence based, paediatric specific trauma imaging protocol in 2014. This recommended chest x-ray rather than CT imaging as the primary imaging modality for major trauma.

Objective: To audit the radiological investigation of major trauma patients with suspected chest injuries.

Method: A retrospective, case-note and radiology review was carried out of all children undergoing radiological investigation for chest injury following significant trauma at a Paediatric Major Trauma Centre between 2011 and 2015.

Results: There were 61 patients admitted of whom 53 (87%) had CXR as their primary imaging modality. Four patients had only CT as the primary imaging and 6 had CT following a normal CXR. Thus 16% of patients received chest CT irradiation that might be reduced if the recently issued guidelines had been followed.

Conclusion: The application of the RCR Guidelines will significantly reduce the radiological exposure of trauma patients without a reduction in diagnostic accuracy. This review highlights the need for wider understanding of the guidelines and their application.