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RCEM Response to RCR Imaging in Paediatric Trauma Guidelines

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In 2014 the Royal College of Radiologists (RCR) published "Paediatric trauma protocols". This document promoted the judicious use of plain radiographs and targeted use of CT following careful examination of injured children by competent clinicians. Routine use of whole-body CT (WBCT) was strongly discouraged. This approach has subsequently been endorsed in the recently published NICE guidance on major trauma management.

The RCEM wholly supports the principle of minimising radiation exposure in injured children, however in selected cases believes there is still a role for WBCT. Major trauma in children is rare and genuine expertise in the management of children with severe injuries is now concentrated in a small number of paediatric major trauma centres. This presents a challenge to clinicians working in other hospitals where the vast majority of children suffering major trauma will first present.

Special consideration must be given to patients who have been exposed to higher energy mechanisms of injury who have clearly suffered severe injury to more than one body region, especially where there are signs of shock. Clinical examination can be misleading where a distracting injury is present or impossible in the context of severe brain injury. Transfer to a paediatric major trauma centre is a vulnerable period for a severely injured child and it will frequently be beneficial to define injuries that might cause deterioration en route before departure.

Although WBCT should not be considered a routine investigation in injured children, it is an investigation that is currently used in selected cases by clinicians who have carefully considered the overall risks and benefits. The RCEM is keen to assure its members and fellows that under such circumstances the use of WBCT in children is still supported by a reasonable body of opinion. RCR and NICE guidelines do not exclude the option of WBCT. This should be considered when discussing imaging strategy with colleagues from other specialties.