

NCSI have a higher mortality and suffer more serious neurologic injury than with single level injury. Injured spinal segments occur at a greater distance in patients with neurologic injury or death. Younger patients with NCSIs had a high rate of associated injuries. Clinicians must be aware of the incidence of NCSIs in children, as well as their associations.

0688 **THE EPIDEMIOLOGY AND CLINICAL FEATURES OF MULTIPLE, NON-CONTIGUOUS SPINE INJURIES IN CHILDREN**

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10.1136/ip.2010.029215.688

Multiple – non-contiguous spinal injuries (NCSI) are complex injuries frequently missed and with increased potential for adverse outcomes. Adult incidence is reported as 1.6–34%, with greater risk of mortality and fracture instability; the paediatric incidence is unknown. A retrospective review at an academic paediatric trauma centre over a 15 year period identified 25 (11.8%) out of 211 patients with NCSI, with a mean age of 10.7 years. MVC was the primary cause for ages 0–9, while a fall was seen for ages 10–17. The mean number of vertebral levels injured was 3.2. The most common region was the thoracic spine, with a mean of 5.4 (range 1–22) intact vertebral levels between injuries. Twenty-four percent with NCSI had a neurologic deficit versus 9.7% with single level, contiguous injuries (RR 2.48 (1.09, 5.65)). Seven (78%) of nine patients aged 0–9 suffered an associated injury, usually a visceral injury. Mortality was 8.0% in patients with NCSI versus 2.7% in patients with single level or contiguous injury. Children with