

PAEDIATRIC TRAUMA AND NON-OPERATIVE MANAGEMENT OF SOLID ORGAN INJURY: VARIATION BETWEEN MAJOR TRAUMA CENTRES IN ENGLAND

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Aims: Published guidelines exist for non-operative management of solid organ injury (SOI) in children –guided by imaging or physiology. National quality indicators for trauma include management guidelines for abdominal trauma in children. This study aims to assess how Major Trauma Centres (MTCs) are: 1) organised to care for injured children, 2) manage SOI non-operatively.

Methods: All MTCs managing paediatric trauma in England were invited to complete a survey. Data collected include: 1) which specialties are involved in the management of severely injured children, 2) lead team managing SOI, 3) guidelines used to manage SOI and 4) uniformity of SOI management within the MTC.

Main Results: 16 MTCs manage paediatric trauma (5 stand-alone children's, 11 combined adult/children, 1 centre with no paediatric surgeon (PS) involvement). All 16 MTCs completed the survey, findings are summarised below and in figure 1.

MTCs categorise paediatric trauma as patients aged ≤ 12 years ($n=1$; 6%), <16 years ($n=14$; 88%), and <18 years ($n=1$; 6%). 6 (38%) MTCs have PS responsible for major trauma patients acting as an "umbrella" trauma service.

SOI in children are managed by PS in 15/16 (94%) centres (1 led by adult general surgeons). 8/14 (57%) followed APSA (American Pediatric Surgery Association) guidelines which was largely uniform among consultants at their centre, and 6/14 (43%) was "consultant-dependent". Two centres have detailed centre specific guidelines.

Conclusion: MTCs show variation in the organisation of teams who care for paediatric trauma patients. Nearly all MTCs in England have PS leading the management of non-operative SOI. The APSA guideline is used to guide bed-rest, although consultant-dependent management occurs. Formal protocols for abdominal trauma are not widely established among MTCs which have the potential to reduce variation in the acute management and recovery period for children.

Figure 1. Major Trauma Centres in England: Management of Solid Organ Injury

