

Conclusions: This audit acknowledged areas of strong guideline adherence, specifically in diagnostic and review domains. Suboptimal pharmacological management and sparse BNP testing were noted. Targeted interventions, medication optimisation, and consistency of referrals can contribute to effective heart failure primary care management.

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SIEGE-TBI: A Conflict-Zone, First-Hour Neurotrauma Protocol and Tele-Brief for Civilian Blast Head Injury

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Background: In besieged urban settings, civilian traumatic brain injury (TBI) surges while CT, theatre access, blood products and bandwidth collapse. Early neuroprotective actions and clear referral messages are frequently delayed by chaos, power loss and inexperienced teams.

Methods: Using an education-design approach, we can compress ATLS/major-incident principles and frontline neurosurgical priorities into a single workflow, stress-tested in tabletop mass-casualty drills with novice responders. Pre-specified feasibility targets were: teach time ≤ 20 minutes; run with blackout-tolerant kit; and assessment via a 12-item critical-actions checklist.

The SIEGE-TBI bundle contains five deployables:

- (1) Triage matrix (penetrating/blunt $\times$ GCS strata) with immediate life-threat red flags.
- (2) Neuroprotect pack with explicit targets: SpO₂ $>94\%$; SBP ≥ 110 mmHg; EtCO₂ 35–40 mmHg; head-up; normothermia; glucose control; anticonvulsant triggers.
- (3) No-CT pathway to decide treat-and-transfer vs hold-and-observe when scanners/staff are unavailable.
- (4) Tele-brief encoding GCS, pupils, lateralising signs, vitals and time-stamped actions for SMS/radio when data fail.
- (5) Blackout pack: headlamp checklist card, paper timestamp strip, pulse-ox and manual BP workflow, reusable for repeated strikes.

Conclusions: SIEGE-TBI offers a pragmatic, teach-today protocol for neurosurgical damage-control and escalation in the trenches.

*Editorial Note: This article describes a study protocol. The proposed study has not yet been conducted, and therefore no data or results are included.

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Pelvic and Acetabular Fractures: A Narrative Review

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Background: Pelvic and acetabular fractures are a subset of orthopaedic injuries which result from high- and low-energy trauma mechanisms. This literature review's objective is to provide an overview of the epidemiology, patient outcomes, and management of pelvic and acetabular fractures, with an emphasis on low-energy fractures.

Methods: A literature search was conducted using papers up to May 2024.

Results: Epidemiologically, increased incidence of pelvic and acetabular fractures is observed in socioeconomically deprived areas and is influenced by patient age, sex, and ethnicity. Negative patient outcomes are associated with the presence of certain pre-morbid variables, namely increased frailty status, significant comorbidities, low mobility status, and obesity. Management of these fractures can constitute either conservative or surgical approaches, which are reported to yield comparable results. Many management-related variables have been identified to also influence patient outcomes, including length of hospital stay, delays to surgery, discharge destinations, post-operative complications, and surgeon experience. Modern research indicates early post-operative weight bearing and mobilization to help promote fracture recovery. Recent development in the care of these fractures includes the regionalization of major trauma centres. Numerous studies link increased mortality risk with advanced age, frailty, low pre-fracture mobility, comorbidities, inpatient discharges, and post-operative complications. Evidence in the association between length of stay

and mortality is less clear, with contradictory findings reported regarding the effects of short versus long stays.

Conclusions: Overall, patient outcomes were significantly influenced by the aforementioned variables, but there is a lack of consensus and research regarding their impact.

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To Remove or Retain? Evaluating Hardware Removal in Paediatric Orthopaedics

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Background: Internal fixation devices are used in paediatric fractures to serve a temporary role of supporting the tissues until bony union is achieved. However due to paucity of evidence-based literature and current clinical guidelines, much controversy remains surrounding this practice. Nevertheless, hardware removal remains one of the most performed operations in paediatric orthopaedics.

Methods: This literature review evaluates the current evidence regarding indications, risks of removal and outcomes of hardware removal in the paediatric population.

Results: Across studies complication rates following removal are around 10%. It is proposed that risks are influenced by anatomical location, duration in situ and length of surgery. Complications of removal include incomplete removal, refracture, infection and neurovascular injury. Potential risks of retaining implants include infection, bony overgrowth, peri-implant fracture and challenges with future procedures like arthroplasty. There is no clear consensus on routine removal versus a selective approach to removal. Current practices are often surgeon preference rather than any evidence-based guidance.

Conclusions: The literature highlights that decisions on removal should be individualised to the patient and implant-related factors. Further research is needed to establish evidence-based guidelines.