

Letter to the Editor

Optimal trauma care requires personnel and infrastructure to deliver optimal care

Madam, we applaud the efforts of Jooma et al in highlighting the deficiencies in trauma care in the developing world.¹ They identify the fundamental need for health-care personnel to provide a structured initial response to trauma. The 'ABCD' trauma dogma is indispensable. However, we wish to stress that technological infrastructure should co-evolve in such services if the injured of the developing world are to receive maximum benefit from this approach. This must be considered when trauma centres are constructed.

Trauma care has shifted towards 'selective non-operative management' (SNOM), particularly following blunt solid organ injuries. Swift surgical intervention remains necessary for patients demonstrating haemodynamic instability or peritonism at presentation. However, a spectrum of visceral injuries has been defined which do not mandate operative management in an otherwise stable patient. This obviates the need for mandatory laparotomy and the attendant complications. Subsequent management may be entirely conservative, with the option to observe the patient, proceeding to surgery if the clinical picture evolves adversely, or to intervene non-operatively e.g. radiologically. However, the network of involved clinicians must have rapid access to modern medical technology.

Blunt splenic injury — common in the motor-vehicle accidents highlighted by Jooma et al — illustrates the approach. Splenectomy is recognised to have adverse consequences. Loss of splenic immunological function confers increased susceptibility to infection. The lifetime risk of 'overwhelming post-splenectomy infection' is low but devastating where it occurs — mortality is of order 50%.² Additionally, post-splenectomy immunisation and prophylactic antibiotic regimes standard in the developed world may falter in a less wealthy population. Large series

of splenic injuries treated non-operatively are documented. In the US, the Eastern Association for the Surgery of Trauma described 1,488 cases of blunt splenic injury, 54.8% of which were amenable to initial SNOM. Failure necessitated later surgery in 10.8% and manifested within 48 hours in the majority (74.7%).³ There is no compelling evidence that successful SNOM confers either increased mortality or morbidity or extended admission when compared to a blanket policy of splenectomy. This is important when the patient bears financial responsibility for treatment. Hepatic injury has seen a comparable paradigm shift towards non-operative management.⁴ At the core of this approach is structured clinical assessment, augmented by advanced radiological techniques, primarily CT scanning, with immediate access to operating theatre and critical care facilities and their attending personnel.

Thus we concur with Jooma et al regarding the necessity of structured medical teams in the provision of immediate trauma care. However, trauma service commissioning must acknowledge current best-evidence when designing trauma services such that an already deprived population is not doubly disadvantaged.

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