BEST EVIDENCE TOPIC REPORTS

Towards evidence based emergency medicine: best BETs from the Manchester Royal Infirmary

Edited by K Mackway-Jones

Best evidence topic reports (BETs) summarise the evidence pertaining to particular clinical questions. They are not systematic reviews, but rather contain the best (highest level) evidence that can be practically obtained by busy practising clinicians. The search strategies used to find the best evidence are reported in detail in order to allow clinicians to update searches whenever necessary.

The BETs published below were first reported at the Critical Appraisal Journal Club at the Manchester Royal Infirmary.¹ Each BET has been constructed in the four stages that have been described elsewhere.² The four topics covered in this issue of the journal are:

- Pelvic radiography in severe blunt trauma
- The management of anterior epistaxis
- Topical analgesia in corneal abrasions
- Wound cleaning solutions

1 Carley SD, Mackway-Jones K, Jones A, *et al.* Moving towards evidence based emergency medicine: use of a structured critical appraisal journal club. *J Accid Emerg Med* 1998;15:220–2.

2 Mackway-Jones K, Carley SD, Morton RJ, *et al.* The best evidence topic report: a modified CAT for summarising the available evidence in emergency medicine. *J Accid Emerg Med* 1998;15:222–6.

Department of
Emergency Medicine,
Manchester Royal
Infirmary, Oxford
Road, Manchester
M13 9WL

Correspondence to:
Kevin Mackway-Jones,
Consultant (e-mail:
kmackway@fs1.mci.man.ac.uk).

Pelvic radiography in severe blunt trauma

Report by Terry Gilpin, *Specialist Registrar*
Search checked by Kevin Mackway-Jones,
Consultant

Clinical scenario

A 40 year old male is admitted into the resuscitation area of the emergency department after

a high speed road traffic accident. He tells you he has not injured his head and has no pain in his pelvic area. He is alert and orientated, he is not under the influence of any alcohol or drugs, and is neurologically intact. You cannot find any major injuries, his pulse is 94, and blood pressure 145/90 mm Hg. He has no pain on flexing his pelvis. You wonder if it is necessary to perform a pelvic x ray.

Table 1

Author, date, and country	Patient group	Study type (level of evidence)	Outcomes	Key results	Study weaknesses
Civil <i>et al</i> , 1988, USA ¹	265 patients with possible major trauma	Prospective survey	Fracture rates by clinical group	Unconscious (GCS<8) 19% Obtunded (8<GCS<15) 11% Pelvic symptoms GCS=1535% No pelvic symptoms GCS=150%	
Salvino <i>et al</i> , 1992, USA ²	810 blunt trauma patients. 12 year old with GCS >13	Prospective survey	Fracture rates by clinical findings (pelvic symptoms and/or signs)	Positive 56.3% Negative 0.04%	
Yugeros <i>et al</i> , 1995, Colombia ³	608 haemodynamically stable adults with GCS >10 and no spinal involvement	Prospective survey	Fracture rates by clinical findings	Positive 96.6% Negative 0.004%	
Ersay <i>et al</i> , 1995, Turkey ⁴	65 conscious, non-intoxicated, orientated patients	Retrospective survey	Fracture rates by clinical findings	Positive 43.8% Negative 0%	Retrospective. Small numbers
Heath <i>et al</i> , 1997, USA ⁵	82 adult, awake, alert blunt trauma victims	Prospective survey	Fracture rates by clinical findings	Positive 38.9% Negative 3.13%	Small numbers

GCS=Glasgow coma score.