BEST EVIDENCE TOPIC REPORTS

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

Edited by K Mackway-Jones, Consultant

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 three topics covered in this issue of the journal are:

- Eye patches and corneal abrasion
- Paracetamol or ibuprofen in febrile children
- Alkalinisation and tricyclic antidepressant overdose

In addition three clinical questions are presented for which no relevant evidence could be found (negative BETs):

- Collar and cuff or sling after fracture of the clavicle
- Curettage or silver nitrate for pyogenic granulomas on the hand
- Support for uncomplicated shaft of humerus fractures

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.

Eye patches and corneal abrasion

Report by Kevin Mackway-Jones, *Consultant*
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Clinical scenario

A young woman attends the emergency department with pain in her right eye. Her infant son has inadvertently put his hand in her eye. Examination reveals a corneal abrasion. You wonder whether an eye patch should be applied to protect the cornea.

Three part question

In [patients with superficial corneal abrasions] is [an eye patch better than no eye patch] at reducing [pain and time to healing]?

Search strategy

Medline 1966 to 12/98 using the OVID interface. {[exp eye injuries OR exp eye foreign bodies OR corneal abrasion\$.mp] AND [exp bandages OR eye patch\$.mp OR patch\$.mp]} AND [maximally sensitive RCT filter].

Search outcome

Forty one papers were found of which 30 were irrelevant and five of insufficient quality for inclusion; the remaining papers are shown in table 1.

Comment

There are six prospective randomised controlled trials of varying quality and power in this area. All show no benefit from patching and the largest shows positive benefit from no patch.

Clinical bottom line

Patients with corneal abrasion should not have an eye patch.

- 1 Hulbert MF. Efficacy of eye pad in corneal healing after corneal foreign body removal. *Lancet* 1991;337:1170-1.
- 2 Kirkpatrick JN, Hoh HB, Cook SD. No eye pad for corneal abrasion. *Eye* 1993;7:468-71.
- 3 Patterson J, Fetzner D, Krall J, *et al.* Eye patch treatment for the pain of corneal abrasion. *South Med J* 1996;89:227-9.
- 4 Kaiser PK. A comparison of pressure patching versus no patching for corneal abrasions due to trauma or foreign body removal. *Ophthalmology* 1995;102:1936-42.
- 5 Campanile TM, St Clair DA, Benaim M. The evaluation of eye patching in the treatment of traumatic corneal epithelial defects. *J Emerg Med* 1997;15:769-74.
- 6 Arbour JD, Brunette I, Boisjoly HM, *et al.* Should we patch corneal abrasions? *Arch Ophthalmol* 1997;115:313-17.

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