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 five topics covered in this issue of the journal are:

- Radiography for fish bones in the throat
- Mobilisation of neck sprains
- Oral or topical antibiotics for impetigo
- Conservative or surgical management for first patellar dislocation
- Splint or plaster cylinder for first patellar dislocation

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;15:220-22.

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.

Radiography for fish bones in the throat

Report by Lesley Bethune, *Specialist Registrar*
Search checked by Rob Williams, *Clinical Fellow*

Clinical scenario

A 40 year old man attends the emergency department having recently eaten fish. He feels that a bone has got stuck in his throat. Examination of the oropharynx does not reveal a bone. You wonder whether an x ray would aid diagnosis.

Three part question

In [patients who might have a fish bone in the throat] is [an x-ray of the neck] indicated to [diagnose and locate the bone]?

Search strategy

Medline 1966 to 6/99 using the OVID interface. ({exp fishes OR fish\$.mp} AND

{exp bone and bones OR bone\$.mp} OR fish-bone\$) AND {exp pharynx OR throat.mp OR exp oropharynx OR oropharynx.mp}).

Search outcome

Forty two papers were found of which were 37 irrelevant and two of insufficient quality for inclusion. The three remaining papers are shown in table 1.

Comment

While there are many studies that show that fish bones can be seen on x ray, the studies in the table show that the clinical utility and accuracy of lateral neck radiography is poor in the clinical situation.

Clinical bottom line

Lateral neck x ray is not indicated in the emergency department management of suspected fish bone impaction.

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Table 1

Author, date, and country	Patient group	Study type (level of evidence)	Outcomes	Key results	Study weaknesses
Ngan <i>et al</i> , Hong Kong, 1990 ¹	310 of 358 patients over the age of 12 years complaining of fish bone ingestion	Prospective diagnostic	Sensitivity Specificity Positive predictive value	32% 91% 66%	
Evans <i>et al</i> , Hong Kong, 1992 ²	100 neck radiographs of patients with known fish bones mixed with 100 normal control films Each assessed by two radiologists	Diagnostic	Sensitivity Specificity Positive predictive value	25.3% 86.3% 72.7%	
Sundgren <i>et al</i> , Sweden, 1994 ³	42 consecutive patients with fish bone ingestion	Retrospective diagnostic	Sensitivity Specificity	28.6% 87.5%	Small numbers