

BEST EVIDENCE TOPIC REPORTS

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

Edited by K Mackway-Jones

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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 Infirmary¹ or placed on the BestBETs website. Each BET has been constructed in the four stages that have been described elsewhere.² The BETs shown here together with those published previously and those currently under construction can be seen at <http://www.bestbets.org>.³ Six BETs are included in this issue of the journal, the last two of which are negative.

- ▶ Abdominal radiography in “body packers”
- ▶ Use of heliox for acute asthma in the emergency department
- ▶ Cardiopulmonary bypass and the survival of patients in cardiac arrest
- ▶ Oral or intravenous thiamine in the emergency department
- ▶ Antibiotic prophylaxis for pretibial haematomas in the elderly population
- ▶ Prophylactic antibiotics for subungual hematoma

K Mackway-Jones, Department of Emergency Medicine, Manchester Royal Infirmary, Oxford Road, Manchester M13 9WL, UK; kevin.mackway-jones@man.ac.uk

- 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.
- 3 Mackway-Jones K, Carley SD. bestbets.org: Odds on favourite for evidence in emergency medicine reaches the worldwide web. *J Accid Emerg Med* 2000;17:235–6.

Abdominal radiography in “body packers”

Report by Jonathan Costello, *Specialist Registrar*
Checked by Will Townend, *Specialist Registrar*

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Abstract

A short cut review was carried out to establish whether an abdominal radiograph has clinical utility in the management of patients who claim to have swallowed drug filled packages. Twelve papers were found using the reported search, of which two presented the best evidence to answer the clinical question. The author, date and country of publication, patient group studied, study type, relevant outcomes, results and study weaknesses of these best papers are tabulated. A clinical bottom line is stated.

Clinical scenario

A 26 year old man in police custody is brought to the emergency department with abdominal pain. He claims to have ingested a large number of drug filled packages. He is tachycardic. Examination is otherwise normal. You wonder if plain abdominal radiography is indicated.

Three part question

In [patients suspected of internal drug carriage (“Body packers”, “body stuffers”)] is [plain abdominal radiography] of [diagnostic utility]?

Search strategy

Medline 1966-03/04 using the Ovid interface. [(Exp Radiography, Abdominal OR abdominal radiography.mp OR abdominal x-ray.mp OR plain abdominal x-ray.mp OR plain film abdomen.mp) AND (body packers.mp OR body stuffers.mp OR body pack\$.mp OR body stuff\$.mp)] LIMIT to human AND English language.

Search outcome

Altogether 12 papers were found of which two were relevant to the topic of interest (table 1).

Comment(s)

The possibility of internal carriage of drugs is an increasingly frequent presentation to urban emergency departments. A diagnostic dilemma is usual because of the credibility of the presentation. It is important, therefore, that clinicians understand the utility of any investigations used. In particular the failure to appreciate the possibility of a false negative result might prove fatal.

▶ CLINICAL BOTTOM LINE

A single abdominal radiograph is insufficiently sensitive to rule out abdominal drug carriage. However, specificity is high and a positive finding is diagnostic.

Karhunen PJ, Suoranta H, Penttila A, *et al*. Pitfalls in the diagnosis of drug smuggler's abdomen. *J Forensic Sci* 1991;36:397–402.

Hierholzer J, Cordes M, Tantow H, *et al*. Drug smuggling by ingested cocaine-filled packages: conventional x-ray and ultrasound. *Abdom Imaging* 1995;20:333–8.

Use of heliox for acute asthma in the emergency department

Report by Michelle Jacobs, *Specialist Registrar*
Checked by Cilla Reid, *Consultant*, John Butler, *Consultant*

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Abstract

A short cut review was carried out to establish whether heliox is of benefit in patients with an exacerbation of asthma