



Is a digital rectal examination necessary in conscious trauma patients with no clinical evidence of a pelvic fracture or neurological abnormality?

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SUMMARY STATEMENT

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REQUEST

In a conscious major trauma patient presenting to the ED with no clinical evidence of a pelvic fracture or neurological abnormality, is a digital rectal examination necessary as part of the standard screening protocol?

REQUESTED BY

Mary Buchanan, Senior Emergency Physician, Emergency Department, Dandenong Hospital.

SUMMARY OF FINDINGS

No evidence was located that addressed the topic of this request.

METHODOLOGY

Search Strategy

The Centre for Clinical Effectiveness defines the 'best available evidence' as that research we can identify that is least susceptible to bias.

First, we search for systematic reviews, evidence based clinical practice guidelines and health technology assessments. Then we identify diagnostic studies with independent blind comparison of an appropriate spectrum of consecutive patients, who have undergone both the diagnostic test and the reference standard. If we identify sound, relevant material of this type, the search stops. Otherwise, our search strategy broadens to include studies that are more prone to bias, less generalisable, or have other methodologic difficulties. While we cite observational and case series studies, narrative reviews and consensus statements in our reports, we do not critically appraise them. These studies can produce accurate results but they are generally too prone to bias to allow determination of their validity beyond their immediate setting.

Details of Evidence Request

Patients (Subjects): Adults trauma patients who present to the ED with no clinical evidence of a pelvic fracture and no neurological abnormality is detected.

Diagnostic test: Digital rectal examination.

Reference test: Pelvic radiography or neurological examination.

Diagnosis: Pelvic fracture or neurological abnormality.

Search terms

Patient (Subject): Wounds and injuries, trauma, conscious.

Diagnostic test: Digital rectal exam, DRE.

(see Appendix 2 for exact search strategy)

Resources Searched

We searched the following databases and internet websites:

Resource	Issue or Access Date
Australasian Medical Index (Informit)	July 14, 2003
CINAHL (OVID)	1982 to July Week 2, 2003
The Cochrane Library (Online)	Issue 2, 2003
EBM Reviews (OVID) -	
• Cochrane Database of Systematic Reviews	2 nd Quarter, 2003
• Database of Abstracts of Reviews of Effectiveness	2 nd Quarter, 2003
• Cochrane Controlled Trials Register	2 nd Quarter, 2003
Medline (OVID)	1966 to July Week 2, 2003
National Guideline Clearinghouse	July 14, 2003
PREMEDLINE (OVID)	July 14, 2003
PubMed (Online)	July 14, 2003

Refinements, Searching & Reporting Constraints

We applied the following inclusion and exclusion criteria to the articles retrieved:

Inclusion Criteria

- Adult patients who have suffered blunt trauma presenting to the emergency department
- All patients received a digital rectal examination
- All patients received a reference test – pelvic radiography or neurological assessment

Exclusion Criteria

- Case series
- Non-English language study

RESULTS:

From the resources searched we identified two potentially relevant articles. We obtained the full text of these articles to determine their relevance. After examination of the two articles, both of the studies were excluded for the reasons outlined in Table.

Table. Reasons for exclusion of studies identified in search

Reason for exclusion	Number
Case series	2
Total	2

No studies were identified that met the inclusion criteria.

Based on our refinements, searching and reporting constraints we are reasonably confident these articles represent the most relevant findings published to date.

REFERENCES

ARTICLES NOT CRITICALLY APPRAISED

Case Studies

McCormick JP, Morgan SJ & Smith WR (2003). Clinical effectiveness of the physical examination in diagnosis of posterior pelvic ring injuries. *Journal of Orthopedic Trauma* 17(4): 257-61.

Porter JM & Ursic CM (2001). Digital rectal examination for trauma: does every patient need one? *The American Surgeon* 67(5): 438-41.

APPENDIX 1

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APPENDIX 2

Search strategy (only MEDLINE search is shown)

	Search terms for MEDLINE
1	digital rectal examination.mp.
2	"digital rect\$ exam\$.tw.
3	DRE.tw.
4	Or/1-3
5	exp "Wounds and Injuries"/
6	trauma.mp.
7	conscious\$.tw.
8	Or/5-7
9	4 and 8

Similar search terms, appropriately translated, were used in other databases.