The inter-examiner difference in diagnosis in acute abdominal pain and the role of decisional tools

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Ethical review	Approved WMO
Status	Pending
Health condition type	Other condition
Study type	Observational invasive

Summary

ID

NL-OMON33310

Source
ToetsingOnline

Brief title
Diagnostic accuracy in acute abominal pain

Condition

- Other condition

Synonym
Acute abdominal pain, quickly developed bellyache

Health condition

aandoeningen geassocieerd met acute buikpijn

Research involving
Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Acute abdominal pain, Decisional tools, Diagnostic accuracy, Inter-examiner

Outcome measures

Primary outcome

The primary outcome is the accuracy of diagnosis of surgeons, surgical residents and ED physicians as well as the accuracy of diagnosis before and after the use of decisional tools for suspected appendicitis and diverticulitis.

Secondary outcome

Certainty of diagnosis before and after using decisional tools, accuracy of diagnosis after using the standard imaging pathway, imaging resource utilisation, length of stay in the Emergency department

levels WBC, CRP and Procalcitonin

Study description

Background summary

A common complaint in emergency medicine is acute abdominal pain. Because the underlying condition can be life threatening, rapid work-up is needed to establish an accurate diagnosis, including adequate choice of imaging techniques. History taking and physical examination are highly examiner-dependent, thus leading to the question: who is best to examine the patient with acute abdominal pain? In current practice almost all patients are examined by surgical residents or emergency department (ED) physicians. To our knowledge, no papers studied the inter-examiner differences between surgeons and residents/ED physicians in assessment of the (preliminary) diagnosis.

Decisional tools can enhance diagnostic accuracy. We developed evidence based decisional tools for appendicitis and diverticulitis, since these are the most common diagnoses in acute abdominal pain. Before the widespread use of these decisional tools, their influence on accuracy and certainty of diagnosis must be evaluated. Repeated laboratory tests are useful in diagnosing appendicitis. However, the influence of repeated testing of WBC, CRP and procalcitonin on the accuracy of diagnosis in acute abdominal pain is not clear. The predictive value of procalcitonin in different common encountered diagnoses in acute abdominal pain is also unclear.

Study objective

The main objective of this study is to evaluate the differences in accuracy of diagnosis between surgeons and surgical residents/ED physicians in patients with acute abdominal pain. In addition the influence of decisional tools for appendicitis and diverticulitis on the accuracy of diagnosis will be assessed. Secondary objectives include the evaluation of the influence of repeated laboratory measurements on the accuracy of diagnosis and the predictive value of procalcitonin for common diagnoses in acute abdominal pain.

Study design

This study is designed as a prospective cohort study.

Study burden and risks

No major risks or benefits are likely to be associated with participation in this study. The burden for the patients consists of a surgeon performing an additional physical examination and a single tap of blood.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

- Abdominal pain with a duration of more then 2 hours and less then 5 days
- Willing and able to give written informed consent

Exclusion criteria

- Age < 18 years
- Pregnancy
- Abdominal pain due to blunt of penetrating trauma
- Hemorrhagic shock due toe gastrointestinal bleeding or ruptured aortic aneurysm

Study design

Design

Study type: Observational invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Diagnostic

Recruitment

NL

Recruitment status:	Pending

Start date (anticipated):	01-09-2009
Enrollment:	300
Type:	Anticipated

Ethics review

Approved WMO Application type:	First submission
Review commission:	METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL29165.018.09