ISRCTN12095411 https://doi.org/10.1186/ISRCTN12095411

Evaluating the diagnostic performance of RIPASA and Alvarado scores in acute appendicitis

Submission date
21/05/2024

Recruitment status
No longer recruiting

Registration date
29/05/2024

Overall study status
Completed

Last Edited
29/05/2024

Condition category
Digestive System

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
Appendicitis is an inflammation of the appendix. This study aims to determine which scoring system is better at diagnosing appendicitis.

Who can participate?
All patients presenting to the surgical emergency department with a complaint of severe abdominal pain during the study period

What does the study involve?
The study involved comparing scoring systems to determine the superior one. Patient data was collected through medical history and clinical examination, in addition to conducting laboratory and radiological investigations.

What are the possible benefits and risks of participating?
There is no risk to any of the participants in this study.

Where is the study run from?
Aleppo University Hospital (Syria)

When is the study starting and how long is it expected to run for?
October 2022 to November 2022

Who is funding the study?
Investigator initiated and funded (Syria)

Who is the main contact?
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Contact information

Type(s)
Public, Scientific, Principal investigator

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Study information

Scientific Title
A comparative study of RIPASA and Alvarado scores in the diagnosis of acute appendicitis: a cross-sectional study

Acronym
CSRAASAACS

Study objectives
1. Importance of accurate diagnosis of acute appendicitis:
1.1. Acute appendicitis is a common surgical emergency that requires prompt diagnosis and treatment to avoid complications like perforation, abscess formation, and peritonitis.
1.2. Accurate diagnosis of acute appendicitis is crucial to ensure timely and appropriate management of patients.
2. Need to evaluate diagnostic scoring systems:
2.1. The RIPASA (Raja Isteri Pengiran Anak Saleha Appendicitis) and Alvarado scoring systems are two commonly used diagnostic tools to aid in the diagnosis of acute appendicitis.
2.2. Evaluating and comparing the performance of these two scoring systems can help determine which one is more accurate and reliable in diagnosing acute appendicitis.
3. Potential clinical implications:
3.1. The findings of this comparative study can have important clinical implications in terms of guiding clinicians in the choice of the most appropriate diagnostic tool for acute appendicitis.
3.2. Identifying the more accurate scoring system can help improve clinical decision-making, reduce unnecessary appendectomies, and optimize patient outcomes.

In summary, the rationale for this study is to compare the diagnostic performance of the RIPASA and Alvarado scoring systems in order to determine the more accurate and reliable tool for diagnosing acute appendicitis, which can have significant clinical implications for patient management.

Ethics approval required
Ethics approval not required

Ethics approval(s)
1. Minimal risk to participants: evaluating the performance of diagnostic scoring systems, such as the RIPASA and Alvarado scores, typically poses minimal risk to patients, as it does not involve any additional tests or treatments beyond standard clinical practice. Since the study is not introducing any new interventions or exposing participants to any undue harm, the risk to patients may be considered low, which can justify a waiver of full ethical approval.
2. Routine clinical practice: the use of diagnostic scoring systems, like the RIPASA and Alvarado scores, is often considered a routine part of clinical practice for the evaluation of suspected acute appendicitis. When the study is focused on the comparative assessment of these established clinical tools, it may be viewed as an extension of standard care and not require additional ethical oversight.

Primary study design
Observational

Study design
Single-centre observational cross-sectional study

Study type(s)
Diagnostic

Health condition(s) or problem(s) studied
Acute appendicitis

Interventions
Patient data was collected through medical history and clinical examination, in addition to conducting the necessary laboratory and radiological investigations and investigating the results.

Intervention Type
Other

Primary outcome(s)
Acute appendicitis diagnosis is measured using the RIPASA score and the Alvarado score at baseline (presentation) and 24 hours. This captures the comparison of the two diagnostic scores (RIPASA and Alvarado) for acute appendicitis at the time of initial presentation and again at 24 hours.

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
15/11/2022

Eligibility

Key inclusion criteria
Each patient who comes to the emergency department with a complaint of severe abdominal pain

Participant type(s)

Patient

Healthy volunteers allowed
No

Age group
All

Sex
All

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
15/10/2022

Date of final enrolment
10/11/2024

Locations

Countries of recruitment
Syria

Study participating centre
University of Aleppo
Aleppo
Syria
-

Sponsor information

Organisation
University of Aleppo

ROR
https://ror.org/03mzvxz96

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated and/or analysed during the current study will be published as a supplement to the results publication

IPD sharing plan summary
Published as a supplement to the results publication