

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

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 29/05/2024	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 29/05/2024	<b>Condition category</b> Digestive System	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> 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?

Dr Mohammad Al-Jawad, mhammadjawad877@gmail.com

## Contact information

**Type(s)**

Public, Scientific, Principal investigator

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**Additional identifiers****Clinical Trials Information System (CTIS)**

Nil known

**ClinicalTrials.gov (NCT)**

Nil known

**Protocol serial number**

Nil known

**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.

### **Study design**

Single-centre observational cross-sectional study

### **Primary study design**

Observational

### **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

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# Sponsor information

## Organisation

University of Aleppo

ROR

<https://ror.org/03mzvzx96>

## **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