

ABSTRACT.

TOPIC.

Comparative study of sensitivity and specificity of Ultrasonography and Computed tomography in clinically suspected acute appendicitis as a diagnostic tool and further correlation with histopathological examination.

INTRODUCTION.

Acute appendicitis is one of the most common surgical emergencies in contemporary medicine. The diagnosis of acute appendicitis is essentially clinical. And advances in radiographic imaging have improved the diagnostic accuracy. This prospective study compared the sensitivity and specificity of Ultrasonography and Computed tomography in clinically suspected acute appendicitis as a diagnostic tool and further correlation with histopathological examination.

STUDY DESIGN.

One hundred and forty nine patients with clinically suspected acute appendicitis, followed the following protocol. Ultrasonography was done to all these patients. When ultrasonography failed to support the diagnosis, the patients were subjected to computed tomography. All the confirmed patients by imaging studies and the clinically suspected acute appendicitis patients were taken up for the surgery. The results of ultrasonography and tomography were correlated with the histopathological examination and the follow up.

RESULTS.

The sensitivity,specificity,positive predictive value,negative predictive value and diagnostic accuracy for ultrasonography were 63% ,75% , 90% , 36% and 66% respectively.

The sensitivity,specificity,positive predictive value,negative predictive value and diagnostic accuracy for computed tomography were 91% ,92% , 95% , 85% and 91% respectively.

The sensitivity,specificity,positive predictive value,negative predictive value and diagnostic accuracy for combined ultrasonography and computed tomography (in inconclusive ultrasonographic cases only) were 97% ,69% , 92% , 85% and 91% respectively.

CONCLUSION.

Computed tomography is better than ultrasonography in diagnosing acute appendicitis. Combined ultrasonography and computed tomography, only in ultrasonography inconclusive cases yielded a high diagnostic accuracy for acute appendicitis .It saved manpower, time ,cost and radiation.