

Abstract

Background: Acute abdomen, marked by sudden onset abdominal pain and often nausea/vomiting, requires urgent attention. Differential diagnosis ranges from benign to life-threatening causes, necessitating imaging for prompt identification. Elderly individuals have a tendency to postpone seeking medical attention and exhibit atypical pathological manifestations and concurrent illnesses, often requiring more time and resources for evaluation. The accuracy of CT scans varies by condition, scanner, and contrast use. They excel in diagnosing emergency room pathologies, with a sensitivity and specificity of 90–95%, aiding abdominal pain diagnosis.

Aims of the study: To study, assess, and diagnose causes of acute abdomen accurately and to assess the diagnostic role of CT in cases where clinical examination and ultrasound failed to provide a diagnosis among the elderly.

Subjects and Methods: A prospective study at Al-Hussein Teaching Hospital Thi-qar's Emergency Department aimed to evaluate CT's diagnostic role for elderly patients with undetermined non-traumatic acute abdominal issues. Seventy-two patients who were over 60 years old, with inconclusive ultrasound, history, and examinations, were assessed from 1st of March 2023, to 1st of March 2024. Patients' demographic and clinical data were collected via questionnaire. They underwent imaging including X-rays, ultrasound, and CT scans, with contrast used selectively. Results were interpreted by a radiologist, guiding further management.

Results: A study of 72 elderly patients with non-traumatic acute abdomen revealed males as 58.3%, mean age 65.23 years. Most resided in urban areas (58.3%), 41.7% were illiterate, and 41.7% were retired. Comorbidities were prevalent (66.7%), primarily diabetes mellitus (44.4%). Tumors were the leading CT diagnosis (29.17%), followed by intestinal obstruction (12.5%). 55.6% required surgery, 44.4% were treated conservatively. Most admissions were to the ward (48.6%), with a mean hospital stay of 3.3 days.

Conclusion: CT imaging aids in diagnosing acute abdominal diseases in the elderly, revealing tumors and obstructions. While valuable, it may not always detect underlying conditions, necessitating comprehensive diagnostic strategies and personalized treatments.

