

# ROLE OF MULTI-DETECTOR COMPUTED TOMOGRAPHY IN DIAGNOSING MIMICS OF ACUTE APPENDICITIS

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## INTRODUCTION

Acute right lower quadrant abdominal pain is one of the most common causes of presentation to the emergency department with acute appendicitis accounting for about one third of those patients. However, a broad spectrum of pathologies may mimic acute appendicitis both radiologically and clinically. Thus, a differential diagnosis in patients with acute lower quadrant abdominal pain is very important to avoid misdiagnosis which can result in delayed treatment or removal of a normal appendix.

## AIM OF THE WORK

The aim of the study was to assess the role of multi-detector computed tomography in the diagnosis of mimics of acute appendicitis.

## PATIENTS AND METHODS

This prospective study included a total of 50 patients (19 females and 31 males with age ranges from 2 to 75 years) who presented with ARLQP (acute right lower quadrant pain). Full detailed history, Pelvi-abdominal US and MDCT was done for all the patients.

Inclusion criteria included the presence of clinical & laboratory manifestations suggesting acute appendicitis.

## RESULTS

Acute urological causes specifically urolithiasis was the most common cause of ARLQP. MDCT showed a sensitivity of 100 % in all cases, giving a fast and correct examination for diagnosing acute obstruction & even subtle calculus.

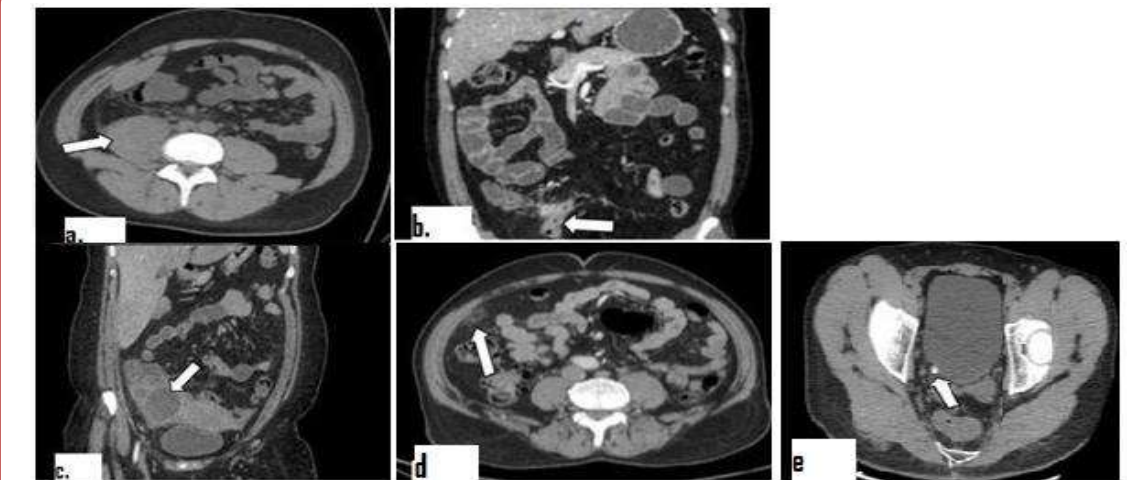
Other causes of ARLQP are illustrated in table 2.

**Table 1:** Distribution of studied patients according to age and gender (n=50).

Age distribution	Gender		Total
	Male	Female	
1-<20	8	1	9
20-<40	15	12	27
40-<60	3	4	7
60-<80	5	2	7
Total	31	19	50

**Table 2:** Distribution of different pathologies

Urological pathology	Bowel pathology	Adnexal pathology	Mesenteric pathology	Retroperitoneal pathology
Upper ureteric stone. (n=2)	Crohn's disease. (n=6)	Ruptured ovarian follicle. (n=2)	Omental infarction. (n=2)	Presacral duplication cyst (n=1)
Middle ureteric stone. (n=1)	Ulcerative colitis. (n=2)	Ovarian hemorrhagic cyst. (n=3)	Mesenteric adenitis. (n=3)	Lumbar spondylodiscitis. (n=1)
Lower ureteric stone. (n=12)	Pseudo-membranous colitis. (n=2)	Ovarian torsion. (n=1)	Gossypiboma. (n=1)	Infected lymphangiocoele. (n=1)
Urinary bladder cystitis. (n=2)	Inflamed colonic diverticulum. (n=1)	Tubo-ovarian abscess. (n=2)		Infected psoas hematoma. (n=1)
	Intussusception. (n=3)			
	Closed loop obstruction. (n=1)			



**Figure:** illustrating different pathologies.

- a) Infected right psoas hematoma
- b) Crohn's disease in the distal ileal loop.
- c) Right Tubo-ovarian abscess.
- d) Omental infarction.
- e) Right vesico-ureteric stone.

## CONCLUSION

MDCT has proved to be an extremely useful noninvasive method for evaluating patients with acute RLQP, allowing diagnosis and management of both common & less common conditions mimicking acute appendicitis.