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The study of acute abdomen cases in the department of surgery

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Abstract

Acute abdomen is a condition in which there is a sudden onset of pain and the patient reveals the signs and symptoms that has something to do with the viscera of the abdomen. It's a real medical emergency because the patients in majority of the cases are frightened. But as a physician we should understand the fact that only about 20 to 30 percent of the cases that present in the office actually need a surgical intervention immediately.

Keywords: USG, abdomen, acute, role

Introduction

Acute abdomen is a condition in which there is a sudden onset of pain and the patient reveals the signs and symptoms that has something to do with the viscera of the abdomen. It's a real medical emergency because the patients in majority of the cases are frightened. But as a physician we should understand the fact that only about 20 to 30 percent of the cases that present in the office actually need a surgical intervention immediately. The emergencies can actually range from simple gastritis to life threatening causes like rupture of the stomach^{1,2}. USG is the preferred choice and in the right and left lower quadrants CT is the preferred choice³. However it should be also understood that the clinical diagnosis, laboratory and the imaging diagnosis will do the job in majority of the case rather than believing and burdening on the imaging diagnosis alone⁴. USG is still the most sought after imaging technique because of its basic simple nature and also cost effectiveness particularly in a country like ours^{4,5,6}. This study puts in a real effort to find the Acute Abdomen Cases in the Department of Surgery

Aims and Objectives: To study the Acute Abdomen Cases in the Department of Surgery

Materials and Methods

This study was done in the Department of Surgery, Kanachur Institute of Medical Sciences, Mangalore.

The study was done from Jan 2019 to Jan 2020

One Hundred cases were chosen who appeared with Acute Abdomen conditions from different Departments.

Inclusion Criteria: Only acute abdomen conditions.

Exclusion criteria: Patients on steroid therapy and immune-suppressive drugs.

Patients who have already been diagnosed and have come with relapse.

Results

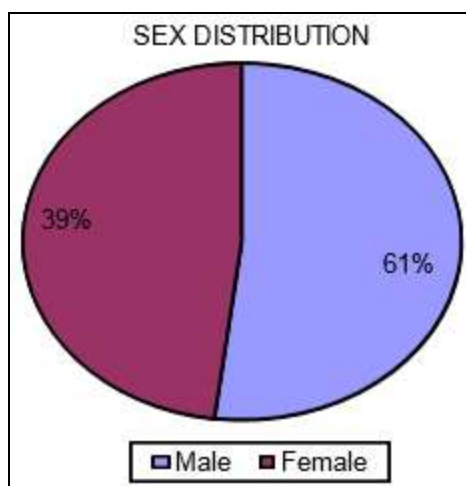
Table 1: Age Distribution

Age in years	No. of cases
1-20	21
21-40	34
41- 60	19
> 60	26
Total	100

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Table 2: Sex Distribution

Sex	Number of cases	Percentage
Male	61	61
Female	39	39
Total	100	100

**Table 3:** Diagnosis (Based upon region)

Region (Pain)	Diagnosis (USG)	Could not be diagnosed by USG
Right upper quadrant	Biliary: cholecystitis Cholelithiasis Hepatic: abscess Hepatitis Mass	Oesophagiti Gastritis Cholangitis
Epigastric	Gastric: peptic ulcer Biliary: cholecystitis Cholelithiasis Pancreatic: mass Pancreatitis	Gastritis Cholangitis Oesophagitis
Left upper quadrant	Gastric: peptic ulcer Pancreatic: mass	Esophagitis Gastritis mesenteric ischemia
Periumbilical	Colonic: early appendicitis Gastric: peptic ulcer small-bowel mass or obstruction	Esophagitis Gastritis
Right lower quadrant	Colonic: appendicitis Gynecologic: ectopic pregnancy PID Renal: nephrolithiasis Pyelonephritis	Colitis IBD IBS Torsion Pyelonephritis
Suprapubic	Colonic: appendicitis Gynecologic: ectopic pregnancy Renal: nephrolithiasis Torsion Total:9 4	IBD IBS
Left lower quadrant	Colonic: colitis Gynecologic: ectopic pregnancy PID Renal: nephrolithiasis	Pyelonephritis

Discussion

The most common causes of acute abdomen depends on the age of the individual also Causes of abdominal pain according to age of child ²

Birth to 1 year	1 st Decade	2 nd Decade	Adults
	<i>Medical</i>		
Infantile colic	Gastroenteritis	Gastroenteritis Constipation	Gastroenteritis Constipation
Gastroenteritis	Lower Lobe Pneumonia	Abdominal Tuberculosis	Lower Lobe Pneumonia
Constipation	Constipation	Bowel disease	Pharyngitis
Urinary Tract Infection	Urinary Tract Infection	Functional Pain	Dysmenorrhea
	Sickle Cell Crisis	Lower Lobe Pneumonia	Mittelschmerz
	Henoch-Schonlein purpura	Pharyngitis	Pelvic Inflammatory Disease
	Mesenteric Lymphadenitis	Urinary Tract Infection	Inflammatory Bowel Disease

		Pneumonia	
		Sickle Cell Crisis	
		Henoch-Schonlein Purpura	
		Mesenteric Lymphadenitis.	
Surgical			
Intussusception	Appendicitis	Appendicitis	Appendicitis
Volvulus/malrotations	Intussusception	Cholecystitis	Ectopic Pregnancy
Incarcerated Hernias	Volvulus	Testicular Torsion	Testicular Torsion
Hirschsprung's disease	Trauma	Trauma	Ovarian Torsion
Necrotizing Enterocolitis			

The most common conditions that has to be diagnosed depends upon the position and the specific quadrant involved. The most commonly involved are

Region (Pain)	Diagnosis (USG)
Right upper quadrant	Biliary: cholecystitis Cholelithiasis Hepatic: abscess Hepatitis Mass Oesophagiti Gastritis Cholangitis
Epigastric	Gastric: peptic ulcer Biliary: cholecystitis Cholelithiasis Pancreatic: mass Pancreatitis Gastritis Cholangitis Oesophagitis
Left upper quadrant	Gastric: peptic ulcer Pancreatic: mass Esophagitis Gastritis mesenteric is chemi
Periumbilical	Colonic: early appendicitis Gastric: peptic ulcer small-bowel mass or obstruction Esophagitis Gastritis
Right lower quadrant	Colonic: Appendicitis Gynecologic: Ectopic pregnancy PID Renal: Nephrolithiasis Pyelonephritis Colitis IBD IBS Torsion Pyelonephritis
Suprapubic	Colonic: Appendicitis Gynecologic: Ectopic pregnancy Renal: Nephrolithiasis Torsion IBD IBS
Left lower quadrant	Colonic: colitis Gynecologic: Ectopic pregnancy PID Renal: nephrolithiasis Pyelonephritis

The most important thing that has to be remembering is the fact that the experience of the sinologist also should be considered. This single criterion can make a lot of difference. The most common technique used to examine patients by majority of the surgeons with acute abdominal pain is the graded manual examination [7]. Furthermore, if the bowel cannot be compressed, the non-compressibility itself is an indication of pathology [4, 7]. The Valsalva manoeuvre may reveal an

intermittent hernia, may show the contiguity of a mass with the intraperitoneal space, allowing better depiction of the hernia sac or abdominal wall defect, and showing reducibility [8]. Curved and linear transducers are most commonly used, with frequencies depending on the application and the patient's stature [9, 10]. Although MRI and CT are options, the common man rarely has that kind of financial freedom to undergo the procedures. So the best alternative is Ultrasound.

Conclusion

This study is a boon to developing surgeons. Acute Abdomen patients will invariably land up in the OPD and its always good to know the conditions before hand for a budding surgeons.

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