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Abdomen cases in the department of surgery

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Abstract

Abdomen conditions are a condition in which the patient reveals the signs and symptoms that has something to do with the viscera of the abdomen. It's a real Surgical or medical cause should be properly diagnosed and handled accordingly. 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 and rest of the cases can be handled with medical line of treatment accordingly. Rarely we can see chronic conditions also in the Department as the patients tend to take analgesics for a long time and then ultimately land up in the Department of Surgery. This study is intended to be of great help to the budding surgeons and physicians and is a result of a sincere effort put down.

Keywords: Abdomen, conditions, surgery, acute, chronic

Introduction

Abdomen conditions are a condition in which the patient reveals the signs and symptoms that has something to do with the viscera of the abdomen. It's a real Surgical or medical cause should be properly diagnosed and handled accordingly. 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 and rest of the cases can be handled with medical line of treatment accordingly.

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 choice ^[3]. 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 alone ^[4]. 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]. Rarely we can see chronic conditions also in the Department as the patients tend to take analgesics for a long time and then ultimately land up in the Department of Surgery. This study is intended to be of great help to the budding surgeons and physicians and is a result of a sincere effort put down.

An effort is put in to find the acute and chronic cases of abdomen that land in the Department of Surgery.

Aims and Objectives

To study the Abdomen Cases in the Department of Surgery

Materials and Methods

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

The study was done from August 2017 to Dec 2019.

536 cases were chosen who appeared with Abdomen conditions from different Departments and were referred to the Department of Surgery.

Inclusion Criteria: Abdomen conditions that was referred to the Department.

Exclusion criteria: Patients on steroid therapy and immune-suppressive drugs. Patients who have already been diagnosed and have come with relapse.

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Results

Table 1: Age Distribution

Age in years	No. of cases
18-30	28
31-40	98
41- 50	37
51-60	42
61-70	119
71-80	171
>80	41

Table 2: Sex Distribution

Sex	Number of cases	Percentage
Male	61	407
Female	39	119
Total	263	536

Table 3: Diagnosis (Based upon region)

Region (Pain)	Diagnosis (Acute)	(Chronic)
Right upper quadrant	Biliary: cholecystitis - 11 Cholelithiasis - 25	Hepatic abscess - 3 Hepatitis Mass - 2
Epigastric	Gastric: peptic ulcer - 37 Biliary: cholecystitis - 3 Cholelithiasis - 2 Acute Pancreatitis - 17	Pancreatic mass - 5 Chronic Pancreatitis - 17
Left upper quadrant	Gastric: peptic ulcer - 19	Pancreatic mass - 09
Periumbilical	Colonic: early appendicitis - 48 Gastric: peptic ulcer - 2 small-bowel mass or obstruction - 14	Chronic appendicitis - 03 Inflammatory bowel disease. - 31
Right lower quadrant	Colonic: appendicitis - 81 Gynecologic: ectopic pregnancy - 5 PID - 3 Renal: nephrolithiasis - 112 Pyelonephritis - 05	Chronic appendicitis - 3 Renal mass - 3 Chronic pyelonephritis - 4 Pelvic mass - 7
Suprapubic	Colonic: appendicitis - 1 Gynecologic: ectopic pregnancy - 1 Renal: nephrolithiasis - 3 Torsion - 1	Chronic appendicitis - 1 Renal mass - 1 Chronic pyelonephritis - 3 Pelvic mass - 11
Left lower quadrant	Colonic: colitis - 16 Gynecologic: ectopic pregnancy - 1 PID - 1 Renal: nephrolithiasis - 1	Chronic appendicitis - 3 Renal mass - 1 Chronic pyelonephritis - 11 Pelvic mass - 12

Discussion

The most common causes of acute abdomen depend on the age of the individual also. 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. The most serious cause of intra-abdominal bleeding is often the ruptured abdominal aortic aneurysm, which requires swift referral to the vascular team and immediate surgical intervention.

Other common causes usually involve a slower rate of bleeding, but with urgent surgery still required, include ruptured ectopic pregnancy, bleeding gastric ulcer, and trauma. These patients will typically go into hypovolemic shock. Clinical features include tachycardia and hypotension, pale and clammy on inspection, and cool to touch. Fortunately we did not encounter any. Sterile technique, aseptic post-operative care, antibiotics, use of the WHO Surgical Safety Checklist, and vigilant post-operative monitoring greatly reduce the risk of these complications. Planned surgery performed under sterile conditions is much less risky than that performed under emergency or unsterile conditions. The contents of the bowel are unsterile, and thus leakage of bowel contents, as from trauma, substantially increases the risk of infection.

The surgery has to be done after taking into account the cause. There are few studies comparing perioperative mortality following abdominal surgery across different health systems. One major prospective study of 10,745 adult patients undergoing emergency laparotomy from 357 centres in 58 high-, middle-, and low-income countries found that mortality is three times higher in low- compared with high-HDI countries even when adjusted for prognostic factors. In this study the overall global mortality rate was 1.6 per cent at 24 hours (high 1.1 per cent, middle 1.9 per cent, low 3.4 per cent; $P < 0.001$), increasing to 5.4 per cent by 30 days (high 4.5 per cent, middle 6.0 per cent, low 8.6 per cent; $P < 0.001$). Of the 578 patients who died, 404 (69.9 per cent) did so between 24 h and 30 days following surgery (high 74.2 per cent, middle 68.8 per cent, low 60.5 per cent). Patient safety factors were suggested to play an important role, with use of the WHO Surgical Safety Checklist associated with reduced mortality at 30 days.

Taking a similar approach, a unique global study of 1,409 children undergoing emergency laparotomy from 253 centres in 43 countries showed that adjusted mortality in children following surgery may be as high as 7 times greater in low-HDI and middle-HDI countries compared with high-HDI countries, translating to 40 excess deaths per 1000 procedures performed in these settings. Internationally, the most common operations performed were appendectomy, small bowel resection, Pyloromyotomy and correction of intussusception. After adjustment for patient and hospital risk factors, child mortality at 30 days was significantly higher in low-HDI (adjusted OR 7.14 (95% CI 2.52 to 20.23), $p < 0.001$) and middle-HDI (4.42 (1.44 to 13.56), $p = 0.009$) countries compared with high-HDI countries. Absorption of drugs administered orally was shown to be significantly affected following abdominal surgery.

Thus the timely diagnosis and treatment for the most common diseases would be accepted.

Conclusion

This study successfully shows the important surgical cases and the location of such cases if the abdomen is divided into quadrants. This study is a foundation for further studies as it can be considered as a base for further exploration of such cases that we deal with in day to day clinics.

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