

# A Clinical Study on Surgical Emergencies

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## ABSTRACT

**Background:** Surgical emergencies are very common. They may be due to trauma (mainly road traffic accidents) and infections like peritonitis. Access to emergency surgical care is limited in many developing countries like Africa, South Asian countries. Perforated appendix and malignancies, penetrating abdominal injuries are also common. Aim of the Study – to study the incidence, management and outcome of emergency surgical cases which are due to trauma and infections. **Methods:** we have conducted this study in our medical college for the period of 1 year from 2014 to 2015. We have examined 200 surgical emergency patients during this period. **Results:** out of 200 emergency patients. Males are 120, females are 80, surgical emergencies due to trauma are 60 cases (30%), Head injury are 20 (10%), Poly trauma including abdominal injuries are 30 cases (15%), miscellaneous are 10 cases (5%). **Conclusion:** Facilities to treat surgical emergencies are still inadequate worldwide, especially in road traffic accidents, and in our country in rural areas where there are no proper transport facilities, The mortality is very high. So to treat surgical emergencies need to improve facilities in suburban and rural areas of our country.

**Key words:** Emergencies, Trauma, Perforation, Mortality.

## INTRODUCTION

Worldwide surgical emergencies are very common more than 50% of surgical admissions are emergencies only,<sup>[1]</sup> The proportion of non-trauma surgical emergencies reported to be between 28% and 52%.<sup>[2]</sup> Acute abdomen, cardiothoracic diseases, acute urinary retention, cutaneous abscess; are the leading causes of surgical emergencies worldwide.<sup>[3,4]</sup> However this pattern varies depending on geographical location and continues to change as a result of socio economic and environmental factors for example Acute appendicitis which was thought to be infrequent among Africans is now the most common cause of acute abdomen in west African countries.<sup>[5,6]</sup> Economic advancement has led to increase intake of refined fiber depleted diet which forms tenacious, firm, slow moving feces. This encourages formation of fecoliths which obstructs the appendix.

Access to emergency surgical care even for medical emergencies also limited in under developed countries and developing countries like Kenya, Uganda, Nigeria, Bangladesh, Srilanka, India.<sup>[8]</sup>

Global health policies have not accorded provision of emergency medical services the designed attention especially in low and medium income nations sub Saharan and south Asian countries. In developed countries like, united kingdom, America, Australia prompt emergency medical care is provided through well-organized social insurance systems.

## MATERIALS AND METHODS

Diagnosis	Males	Females	%Percentage
Duodenal Perforations	30	5	35(17.5%)
Acute intestinal obstruction	13	10	23(11.5%)
Malignancies	6	5	11 (5.5%)
Splenic rupture	7	3	10 (5%)
Stab injury	5	2	7 (3.5%)
Blunt injury	6	1	7 (3.5%)
Vascular	3	2	5 (2.5%)

We have examined 200 patients during the period of Nov, 2012 to Oct,2013. Males are 120 (60%), females are 80 (40%). Traumatic emergencies are 60(30%), traumatic emergencies are mainly due to road traffic accidents, with head injuries are 25(10.2%), poly trauma including abdominal injuries are 32 (16%) non traumatic emergencies are 140(70%) in these duodenal perforations are 35 (17.5%), acute intestinal obstruction are 23 (11.5%), malignancies 11 (5.5%), splenic rupture are 10

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(5%), stab injuries 7 cases (3.5%), blunt injury abdomen 7 cases (3.5).

Vascular emergencies 5 (2.5%), others miscellaneous.

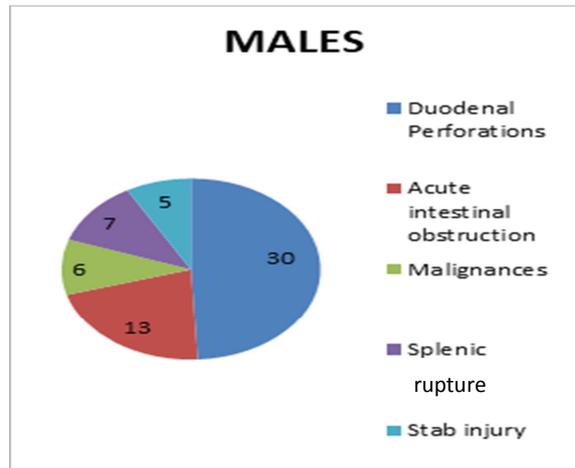


Figure 1: Emergency Cases in Males

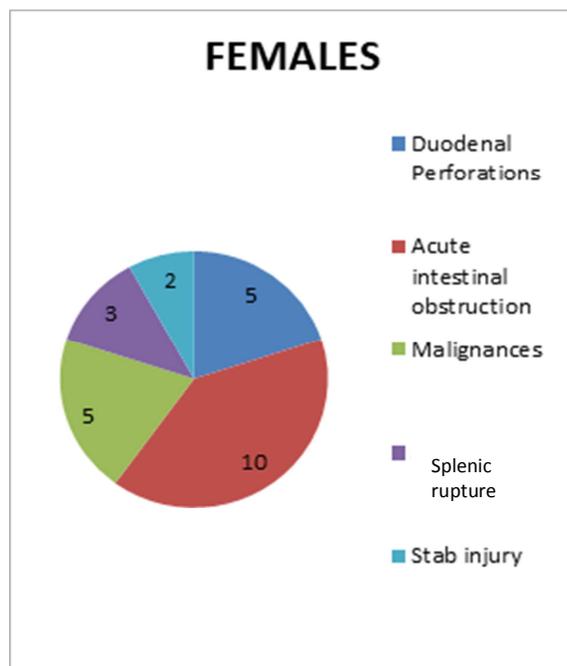


Figure 2: Emergency Cases in Females

## RESULTS

A total no. of 200 cases were examined in our hospital. Males were 120 (60%), female were 80 (40%) traumatic cases were 60 (30%) with head injury were 20 (10%). Mortality is high with traumatic emergencies 7(3.5%), head injury patients and 9 (4.5%) poly traumatic patients who died in the emergency department. In duodenal perforations 2

patients died because of other comorbid conditions, 2 deaths occurred in vascular emergencies 2 deaths occurred due to malignancy. We have referred 2 head injury patients to neurosurgical center and 2 patients to cancer hospital.

Among the patients admitted for treatment 75 (32.5%) patients had emergency surgical interventions. Intestinal obstructions and perforations were most frequent indications for surgery.

## DISCUSSION

Emergency surgical conditions present acutely and needs surgical intervention. Acute abdomen is the most common condition in our study. It is the most common non trauma condition world wide. The study conducted by B.O. Mobikoya GO. Enwelyo K.H.tiyani. Shows similar results.<sup>[9]</sup> Urological emergencies are slowly increasing because of aging population and benign prostatic hyperplasia. Malignancies are also becoming frequent cause of surgical emergencies. Breast cancer is increasing in many developing countries. The spectrum of surgical diseases continues to change especially in low and medium income countries due to increase aging of population and urbanization.

Studies have shown that most of the developing countries especially sub Saharan Africa lack sufficient infra structure to carry out what is deemed by world health organization. In a report from Pakistan patients bypassed the lower levels of care because of dissatisfaction with the quality care, non availability of physician and belief that their illness could not be handled at lower level centers.

Studies have shown that non trauma emergencies require surgical intervention more often than trauma emergency.<sup>[10]</sup> Surgery for acute abdomen constituted 2/3 of non trauma operations with acute appendicitis, perforated appendix and peritonitis are the most common causes.

Mortality is high in surgical emergencies especially in head injuries and polytrauma cases. Acute abdomen and advanced malignancy are also major cause of death worldwide.

The diagnosis of surgical emergencies depend upon laboratory's investigations like Blood urea, Sr. creatinine, Blood sugar, Blood grouping, electrolytes and X-ray and ultrasound, CT Scan and MRI Scan X-ray is useful to rule out rib fractures US Abdomen can be used to detect any Mass Hematoma and MRI for masses and any vascular emergencies.

## CONCLUSION

More than 20% cases are traumatic emergencies major cases are because of road traffic accidents. Acute abdomen cases are also increasing. In India except in major cities other areas are not having proper emergency surgical centers. The world health organizations have recognized the gaps in the provision of emergency and essential surgical and anesthetic services in developing countries with end result of high rates of death and disability from surgically treatable conditions. Strengthening of primary and secondary health care centers should be done to avoid high mortality and morbidity.

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