



TO STUDY THE PATTERN OF DISEASE PREVALENCE IN ADMITTED PATIENTS IN THE DEPARTMENT OF GENERAL SURGERY IN A MEDICAL COLLEGE HOSPITAL IN RURAL UTTAR PRADESH, INDIA

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ABSTRACT

Patients present with a wide spectrum of diseases in the department of general surgery, namely gastrointestinal, hepatobiliary, urinary tract disorders, lumps of varied pathology, abscesses, hernias, diseases of the breast, testis etc. Surgical diseases represent an immense source of disease burden globally. Some of these are treated conservatively while others have to be operated upon. Patients may present in the out patient department or in the emergency department. In the present study diseases of the gastrointestinal tract were the most common. Most common single operative procedure was cholecystectomy. The present study aimed to decipher the pattern of disease prevalence in 2963 patients admitted in the department of general surgery at FHMC, Tundla, Uttar Pradesh, India. This is a medical college hospital situated in rural Uttar Pradesh. This study intends to identify the surgical conditions which constitute the disease burden in this particular region.

KEYWORDS : Surgical conditions, disease burden

INTRODUCTION:

Surgical conditions are defined as disease states requiring the expertise of and intervention of a trained general surgeon. Surgical care is defined as the processes which decrease the rate of physical morbidity and premature death associated with any surgical condition¹. There is a wide spectrum of surgical diseases for which patients seek admission to a surgical unit. The pattern of diseases varies from place to place and according to age, race and socioeconomic class in different populations. The essentials in surgical care vary with the disease pattern of each region. Knowledge of local disease pattern is useful to train manpower and allocate resources so that the needs of the patients are met with². This may include special training of paramedical staff along with recruitment of qualified superspeciality surgeons in various disciplines. This study also identifies the surgical conditions which constitute the disease burden in this region.

MATERIAL AND METHODS:

This is a retrospective study conducted in FHMC, Tundla, Uttar Pradesh, India which is a medical college hospital which caters to rural population. Patients who were admitted in the department of general surgery either through out patient department or emergency department from January 2016 to Feb 2017 were included in this study. All patients who were admitted as a surgical case were included³. Patients operated upon on an outpatient basis were also included. Patients who were shifted to surgery department from other departments were also included. All the data was charted into data sheet using records from patient files, admission register and operation theatre records.

RESULTS:

A total of 2963 patients admitted from January 2016 to February 2017 in the department of general surgery at FHMC, Tundla, Uttar Pradesh, India were included in this study. 1037 patients were treated conservatively and 1748 patients were operated upon. 178 Patients were referred elsewhere. There were a total of 1729 male patients and 1234 female patients. The mean age of patients was 46 years. 796 patients had alimentary tract disorders, 711 had genitourinary disorders and 470 had hepatobiliary disorders. The most common minor operative procedure was incision and drainage of abscess. The most common major surgical procedure was cholecystectomy followed hernia repair surgery. Many patients had to be referred to other centers due to inavailability of superspecialities.

DISCUSSION:

The pattern of disease prevalence in this area is depicted clearly by the wide spectrum of operative procedures conducted and

admissions done in the department of general surgery, FHMC, Tundla. It was found that cholelithiasis alone forms 12.6% of total admissions in surgery ward of this hospital and cholecystectomy accounts for 20.6% of total surgeries conducted. Cholecystectomy is the most common major surgical procedure at this center. Cholelithiasis affects approximately 10% of adult population in the Asian countries^{4,5}. Its prevalence varies and has been reported as 2 to 29% in India and has increased in recent years. It is a chronic recurrent disease of the hepatobiliary system.¹⁷ The risk factors predisposing to cholelithiasis are female gender, multiparity, obesity, increased age, diabetes mellitus, use of oral contraceptives, dislipidemia, unsafe drinking water and alcohol consumption^{5,10}. Another common procedure in this study is hernia repair surgery as seen in other studies^{3,13,14,15}. It accounted for 13.7% of total surgeries. Incidence of inguinal hernia is high in this region because the disease in adult population is mainly occupational as majority of people in this area are farmers or manual labourers. In this series the commonest cause of admission in the emergency department was acute abdomen due to different pathologies, namely, ureteric colic, urinary tract infection, acute retention of urine, acute appendicitis, cholecystitis, acute intestinal obstruction, perforation peritonitis, non-specific abdominal pain etc. Most common operative procedure in emergency department was appendectomy, followed by exploratory laparotomy.

Appendectomy accounted for 9.7% of total surgeries. Acute appendicitis is among the most common causes of surgical abdominal diseases worldwide^{6,7,9}. It is an intra-abdominal condition requiring emergency surgery with a lifetime risk of six percent.¹⁸ Soft tissue infections were also common in this series for which incision and drainage was needed. This is similar to findings in other studies which show that acute bacterial skin infections are very common, with various presentations and severity⁸. Most common pathology requiring admission was gastrointestinal diseases which was in accordance with other studies¹. This is because of the poor hygiene and sanitation and low socioeconomic status of people in this area. Patients which needed referral to other centers were of malignancies and genitourinary conditions requiring minimally invasive procedures for the management of which facilities were not available in this setup like upper and lower GI endoscopy, endourology, magnetic resonance imaging, nuclear imaging and radiotherapy.

CONCLUSION:

The spectrum of surgical conditions is generally considered a reflection of disease prevalence in a region². It also depicts the surgery burden of that particular area. The most common cause of admission in this region is alimentary tract disorders. This was in

accordance with other studies¹.Most common major surgical procedures are cholecystectomy and hernia repair. These findings are also in accordance with those at other centers.Appendicectomy is the most common emergency surgical procedure in this study.So these are the major disease burdens of this particular area.

Table – 1

Sex	No. Of Patients
Male	1729
Female	1234

Table – 2

Mode OF Admission	No. Of Admissions
OPD	2133
Emergency	830

Table – 3

Management	No. Of Patients
Operative	1748
Conservative	1037
Referred	178

Table – 4

Operative procedures	No. Of Patients
Incision And Drainage	252
Lump Excision	226
Hernia Repair	240
Cholecystectomy	361
Appendicectomy	171
Genitourinary Surgery	69
Breast Surgery	65
Haemorrhoidectomy	54
Exploratory Laparotomy	52
Miscellaneous	298
Total	1748

Table – 5

GIT	APPENDICITIS	208
	HAEMORRHOIDS	69
	ANAL FISSURE	22
	FISTULA IN ANO	16
	INTESTINAL PERFORATION	64
	PEPTIC ULCER PERFORATION	22
	INTESTINAL OBSTRUCTION	61
	CARCINOMA OF GIT	36
GENITOURINARY	OTHERS	298
	UTI	341
	BPH	46
	RENAL CALCULUS	52
	URETERIC CALCULUS	181
	VESICAL CALCULUS	18
	HYDROCOELE	26
HEPATOBIILIARY	OTHERS	47
	CHOLECYSTITIS	376
	CHOLEDOCOLITHIASIS	17
	PANCREATITIS	34
	LIVER SECONDARIES	6
	LIVER ABSCESS	12
HERNIAS	OTHERS	25
	INGUINAL	255
	INCISIONAL	18
	UMBILICAL	14
SUPERFICIAL LUMPS	EPIGASTRIC	10
	ABSCESS	252
	SEBACEOUS CYST	88
	DERMOID CYST	32
	LIPOMA	61
OTHERS	45	

BREAST	FIBROADENOMA	47
	CARCINOMA	12
	ABSCESS	16
	OTHERS	4
POST TRAUMATIC		132
TOTAL		2963

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