

ORIGINAL ARTICLES

DISEASE PATTERN IN ADMITTED CASES OF SURGERY DEPARTMENT OF A DISTRICT HOSPITAL

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Summary

There are very few studies regarding the surgical problems of the rural people. For this purpose a study was conducted to analyse the trends in the surgical inpatients of a district hospital.

The study was done at Munshiganj District Hospital from January to June 1993. It is a 50 bedded hospital with no facility for general anaesthesia. Patients were diagnosed by history, physical examination and relevant investigations.

Total admissions were 544, of them 340 were male and 204 female; 79% were admitted through the emergency department. Physical assault topped the list (39%) followed by patients with abdominal complaints (27%). Other cases included road traffic accident (15%), abscess (4%), burn (3%), neoplasm (3%) and hernia/hydrocele (2%). Total cases operated were 120. Majority were done under local anaesthesia; spinal and caudal anaesthesia were given in some cases. However 68 cases (12.5%) needed referral to other hospitals where general anaesthesia facility is available.

Physical assault unfortunately taxes the hospital resources and manpower. Social motivation can improve the situation. Since at least 12.5% cases could not be managed without general anaesthesia, this facility should be made available to all district hospitals which are still lacking in this field.

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Introduction

There are many studies done abroad which relates function and demand of hospital services^{1,2}. In Bangladesh there are some studies on the pattern of surgical inpatients and on casualty admission carried out at big central hospitals. But there are very few studies involving the surgical problems of the rural people³. Therefore the pattern of surgical cases in the district hospitals and their associated problems need to be studied further. For this purpose we conducted a study to analyse the trends in the surgical inpatients of a district hospital.

Materials and methods

The study was done at Munshiganj District Hospital from January - June 1993. The district of Munshiganj lies about 25 km. southwest of the capital city, Dhaka. It has an area of 969 sq. km. and a population of just over one million. It may be mentioned here that although a 50 bedded general hospital, it lacks adequate

investigation facilities and has no provision for general anaesthesia. A total of 544 patients were included. A careful history was taken from each of the patients followed by physical examination. A routine blood and urine test was done. Plain X-ray and histopathological examination was done as needed. Only in select cases contrast radiography and ultrasonography were carried out.

Results

Total number of cases admitted were 544, of them 340 were male and 204 were female : 430 (79%) were admitted through the emergency department (Table - I).

Table-I

Period of study	:	Jan to June 1993
Total No. of inpatients	:	544
Male	:	340
Female	:	204
Number of emergency admission	:	430 (79%)

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Table-II shows the disease pattern in the surgical inpatients of the hospital.

Table-II
Disease pattern in surgical inpatients (n=544)

Disease	No. of patients	%
Physical assault	211	38.78
Abdominal cases	148	27.20
R. T. A./Injury	84	15.44
Abscess/Cellulitis	23	4.23
Burn	19	3.49
Neoplastic disorder	18	3.31
Hernia/hydrocele	10	1.84
Misc : peripheral vascular disease epididymoorchitis, etc.	22	

Physical assault topped the list with 211 cases (38.78%) followed by patients with abdominal complaints with 148 cases (27.20%). Road traffic accident (R.T.A.) and household injuries were in third position. Other cases included abscess/cellulitis, burn, neoplasm and hernia/hydrocele in decreasing order of frequency. Abdominal problems and burns were more common in females while R.T.A. and injuries were more common in male subjects.

Table - III shows the total number of operations done along with the type of anaesthetic methods used.

Table-III
Principal anaesthetic methods used in 120 operations

Method	No. of cases	%
Local anaesthesia	98	(82%)
Sedation only	11	(9%)
Spinal anaesthesia	7	(6%)
Caudal anaesthesia	4	(3%)

Table - IV shows the distribution of surgical cases where general anaesthesia was essential.

Table-IV
Cases where G.A. was essential

Disease	No. of patients
Abdominal cases	
Acute	38
Chronic	15
Neoplastic disorders	7
R.T.A./injury	6
Physical assault	2
68 (Total)	

Discussion :

It is alarming that about 40% of the total surgical inpatients are physical assault cases. This being the commonest problem, taxes the hospital resources and manpower. It is very unfortunate specially for hospitals with resource constraint. The situation can possibly be improved by social motivation in addition to strict law enforcement. It may be mentioned here that physical assault is a common cause of head injury in the young adults of Scotland⁴. It implies that violence and vengeance are still at large in this civilized world.

Our study demonstrates that 12.5% of admitted cases could not be managed without G.A. These patients were referred to other hospitals where G.A. facility was available. This was possible because of the constant availability of an ambulance. The other important factor was that the capital city Dhaka and the adjacent district town Narayanganj (where) hospitals with G.A. facility are available, is only 25 and 10 kilometers away respectively. The road communication is reasonably good and therefore transferring these patients were not much of a problem. Even then we had to face difficult situations from time to time. The situation is far more difficult in those hospitals which are more remote and where transportation of patients are not easy.

Under these circumstances the use of ether and ketamine 5 anaesthesia remains the only alternative for the surgeon. The use of spinal and caudal anaesthesia in selected cases is also

very helpful. Of course, the surgeon has to be familiar with their uses. In the absence of an anaesthetist, the surgeon has to take the whole responsibility of the patients safety during and after operation. Monitoring the patients vital signs, keeping a vigilant lookout for any complication during the operative procedure is an added burden for the surgeon. It often taxes him physically as well as mentally.

This situation can only be improved by extending proper anaesthesia facility (with trained/qualified anaesthetist and G.A. machine) to all the district hospitals which are still lacking in this field. This will certainly reduce unnecessary referral of patients and improve the quality of surgical services rendered to the rural people of the country.

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