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Pattern of Peptic Perforation at VSS IMSAR, Burla- Retrospective Study of 100 Cases

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Abstract
Acute peptic perforation may occur in gastric & duodenal ulcers. Proton pump inhibitors, H2 blockers, H pylori eradication therapy has still not slowed down the incidence of Acute peptic perforation. In emergency gastric surgery, Acute peptic perforation is still the most common emergency surgery associated with high mortality & morbidity. In emergency acute peptic perforation were diagnosed by the gas under diaphragm in x-ray abdomen in straight erect posture & obliteration of liver dullness. The main surgical treatment was simple closure with grahams patch. Data was collected on various variables such as age group, sex, blood group ,seasonal occurrence ,dietary habits, drug history, lifestyle history, prior diagnosis to surgery, findings on admission/per operative findings, methods of operation, complications. A clinical pattern of peptic perforation was carried out at emergency of the department of general & laparoscopic, surgery, VSSIMSAR, Burla, Odisha between 2012 & 2016 july.

INTRODUCTION

"Lord moynihan has stated that perforation of duodenal or gastric ulcer is one of the most serious & overwhelming catastrophes than can befall a human being".

Peptic perforation is an emergency situation to be dealt with utmost urgency. It occurs in 5-10 % of patients presenting with a duodenal ulcer. Peritonitis caused by a perforated ulcer represents 3% of all abdominal emergencies.

The mortality rate when operation is performed within 6 hrs of onset of pain approches zero, from 6-12 hrs the rate is 5-10%, 12-24 hrs it is 25% or higher & in the course of 3rd day after, operations are seldom successful & is acheived only by prompt healthcare from a qualified professional.

AIMS & OBJECTIVES

1. To study the pattern of peptic ulcer perforation in VSSIMSAR, Burla.
2. To study the course of treatment, follow up period, complications mortality, morbidity of the disease.

INCLUSION CRITERIA

Any patient presenting to emergency with history of pain abdomen, distension of abdomen, presence of gas under diaphragm with x-ray abdomen erect & obliteration of liver dullness.

EXCLUSION CRITERIA

Patient with x-ray finding not attributable to gas under diaphragm were excluded from this group.

MATERIALS & METHODS

The study covers 100 patients treated in the emergency in Dept. of general & laparoscopic surgery VSSIMSAR from 2013 To 2016 july

We collected data from bed tickets, regarding presentation, investigations, surgical procedures done, complications, follow up & entered into a standard format & processing was done using Microsoft excel.

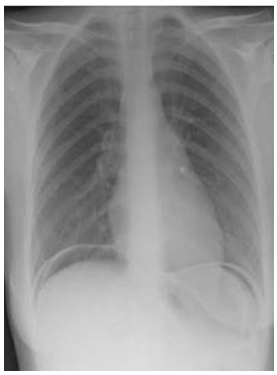
OBSERVATION

CLINICAL FEATURES

1. PAIN ABDOMEN-sudden & agonizing pain in upper abdomen radiating to shoulder tip.
2. VOMITTING & NAUSEA-more than 70 % patients complained of vomiting & less than 20% were having nausea at the time of admission.
3. HAEMORRHAGE-association with perforation is a grave complication.

SIGN

1. ABDOMINAL RIGIDITY & TENDER-NESS – was observed in all cases.
2. OBLITERATION OF LIVER DULLNESS- due to collection of free air under the diaphragm.70 % of the patients were having obliteration of liver dullness.
3. BOWEL SOUNDS- in 80 % cases bowel sounds were absent,1n 10 % bowel sound were diminished .



X-ray abdomen straight erect showing free Gas under both domes of diaphragm.

Table 1-Age of Incidence

AGE GROUP	NO OF CASES	%
0-20	2	2
20-40	20	20
40-60	55	55
>60	28	28

Peak incidence of peptic perforation was noted in the 40-60 age group with 55 % occurrence. the youngest patient is 16 years old and oldest 83 year

Table -2 –Incidence Related To Blood Group

Blood Group	No Of Cases	%
O	45	65
A	23	23
B	20	20
Ab	12	12

O group patients with perforation was common in the study with 45 %

Table-3 Sex Wise Distribution Of Patient

YEAR	MALE (% of patients)	FEMALE (% of patients)
2013 to 2016 July	85	15

PEPTIC PERFORATION WAS MORE COMMON IN MALES THAN FEMALES .THIS CAN BE ATTRIBUTED to anxiety, stress, strain, indulgence to smoking, alcoholism, drugs, irregular dietary habit

Table 1 size of perforation

Size of perforation	Gastric ulcer	Duodenal ulcer	Total	%
Small (<3mm)	3	27	30	30
Medium (4-6mm)	5	45	50	50
large (7-10mm)	1	11	12	12
Very large >10mm	2	6	8	8

In our study, over 80 % of cases had small & medium perforations, large in 12.I, 8 % cases were very large perforations.

11 % cases were gastric ulcer perforations. their margins were sent for histopathology study. 89 % cases were duodenal ulcer perforations.

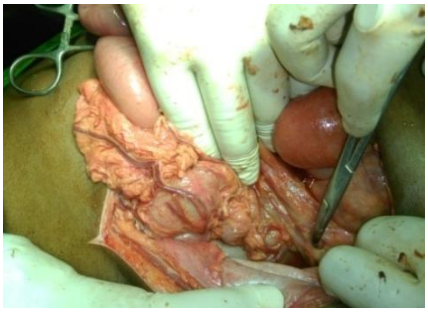


Table-4 type of peritoneal fluid

Peritoneal fluid types found per operative	cases	%
Bile stained	40	40
turbid	35	35
purulent	25	25

40 % were found to be having biliary peritonitis. Purulent peritonitis were of late presentation variety with poor eneral condition

Table 2 Surgical treatment of peptic perforation

Operation type	Gastric ulcer perforated	Duodenal ulcer perforated	Total
Simple closure with grahams patch	14	80	94
Ulcer excision with vagotomy & Pyloropasty	nil	nil	nil
Flank drain	2	4	6

Simple closure of perforation and grahams patch was done in 94 No of patients

Definitive surgery that is truncal vagotomy & gastro jejunostomy wa not done as all were emergency cases.

Flank drain under local anaesthesia were given under local anaesthesia in 6 no of patients treated conservatively to be operated later , 2 survived,4 died.

Table – 3 Seasonal Occurrence of Peptic Perforation

Months	% of patients
January – March	23
April – June	15
July – September	16
October - December	46

Perforations were found to be more common in winter season in this study

Table – 5

Occupation	No. of patients	Percentage
Farmer,manual labourer	70	70
Drivers	5	5
Government officials	3	3
Students	6	6
others	16	16

70 % of farmers & manual labourers were the worst sufferers owing to irregular diet habit & alcoholism

Table – 6

History of dyspepsia/ Peptic ulcer disease	Incidence
Yes	80
No	20

Table 7

Habits	No. of Patients	Percentage
Smoker	20	20
Alchoholic	15	15
Both	15	15
nil	50	50

15 % of patients were found to be alcoholic .15 %of patients were found to be both alcoholic and smoker

Table -8 Complications

Complications	no of patients	%
CHEST INFECTION/PNEUMONIA/ARDS	12	12
ABSCESS (PELVIC+ SUB PHRENIC)	6	6
SEPSIS	17	17
WOUND INFECTION	35	35
DUODENAL FISTULAE	2	2
DEATH	4	4

Most common complication were wound infection. they were noted in 35% of patients. they were drained in early post operative period.

Wound dehiscence occurred in 15 no of patients & they required secondary suturing.

Sub phrenic abscess were found in 6 no of patients. pelvic abscess were found i 6 no of patients. fever & mucous diarrohea occurred in late post operative period .those were drained immediately.

Duodenal leak occurred in 2 no of cases and were managed conservatively
Death occurred in 8 no of patients

CONCLUSION

Duodenal ulcer perforation is the second most common abdominal emergency In our study. Despite all medical measures present elective surgery for peptic perforation is decreasing but the incidence of perforation is unchanged
Most of the patients were middle aged males of low socio economic status .this can be explained to irregular dietary habit, over the counter use of drugs –NSAIDS/STEROIDS in ayurvedic preparation.
In our series all cases are managed by omental patch and no definitive surgery were attempted due to low general conditions of the patients.
In most of our follow up patients they have not needed any revision surgery. all pelvic abscess were treated conservatively except 1 who needed a per rectal drainage .2 leaks in the post operative period were managed conservatively and healed spontaneously.

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