



A Retrospective Study on Perforation Peritonitis

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Abstract

Perforation is one of the most serious and overwhelming catastrophic condition, subsequently they should be dealt energetically. It is the most common surgical emergency in our locality. The objective of the observe is to spotlight the age incidence, etiology, management and consequences of the sufferers admitted with perforation peritonitis. A retrospective study was carried out on 100 sufferers admitted at Rajah Muthiah Medical College and Hospital for a length of 3 years from 2015 to 2017.

Keywords: *Perforation peritonitis, Smoking and Alcohol, NSAID, age and sex incidence.*

Introduction

Duodenal ulcer perforation is the second most common abdomen emergency in our look at. After invention of the H2 blockers and proton pump inhibitors surgical operation for duodenal ulcer has been substantially decreasing, but the occurrence of perforation is not a lot changing.^[5]

Peptic ulcer refers to painful sores or ulcers inside the lining of the stomach or first a part of the small intestine, known as the duodenum.

Peptic ulcer illness (PUD), additionally called a peptic ulcer or stomach ulcer, ^{[1][2]}. An ulcer within the first part of the intestines is referred to as a duodenal ulcer. The symptoms are waking at night time with stomach ache. The pain is often defined as a burning or dull ache. Other symptoms consist of belching, vomiting, weight loss. Complications can be bleeding, perforation, and blockage of the stomach. Bleeding takes place in as many as 15% of humans ^[3].

The first description of a perforated peptic ulcer was seen in 1670 in Princess Henrietta of

England^[3] H. Pylori became first diagnosed as inflicting peptic ulcers by Barry Marshall and Robin Warren in the late 20th century,^[7] a discovery for which they obtained the Nobel Prize in 2005.^[8] multiple cause has been discovered for ulcers. However, it is clear that an ulcer is the result of an imbalance among digestive fluids inside the stomach and duodenum. Most ulcers are as a result of an infection with a form of bacteria referred to as Helicobacter pylori (H. Pylori).

Factors that would boom the chance for ulcers are:

- Use of painkillers called non steroidal anti-inflammatory pills (NSAIDs), consisting of aspirin, naproxen, ibuprofen; even safety-coated aspirin and aspirin in powered shape can regularly cause ulcers.
- Excess acid production from gastrinomas, tumors of the acid producing cells of the belly that increases acid output
- Excessive ingesting of alcohol
- Smoking or chewing tobacco
- Serious infection

- Radiation treatment

An ulcer may also or may not have signs and symptoms. When symptoms arise, they'll consist of: a gnawing or burning abdominal ache at night time associated with

- Bloating
- Heartburn
- Nausea or vomiting

In severe instances, symptoms can encompass:

- Dark or black stool (because of bleeding)
- Vomiting blood
- Weight loss
- Severe abdomen pain

Though ulcers often heal, you shouldn't ignore their warning symptoms.

Untreated ulcers can bring about intense problems, which includes:

- Bleeding
- Perforation
- Gastric outlet obstruction from swelling or scarring that blocks the passageway

Taking NSAIDs can bring about an ulcer and perforation. The hazard is high for the aged people with a prior history of peptic ulcer disease. Following are the scenario were in ulcer and perforation are very common.^[6]

- H. Pylori bacterium contamination
- Take NSAIDs consisting of aspirin, ibuprofen, or naproxen
- Family information of ulcers
- liver, kidney, or lung disease
- Drink alcohol frequently
- Are age >50

The pathological findings are the essential sources of the records of the ulcerative sicknesses. The study types of gastric production and the hormonal manipulate of gastric secretion of peptic ulcer have made critical contributions^[9-11].

A perforated ulcer, is when an untreated ulcer can burn via the wall of the belly (or different areas of the gastrointestinal tract), allowing digestive juices and meals to leach into the abdominal cavity. Treatment generally requires emergency surgical treatment.^[1] A diagnosis is made via taking an erect abdominal/chest X-ray (attempting

to find air below the diaphragm). This is in truth one of the only a few activities now a days wherein surgical operation is undertaken to address an ulcer.^[2] Many of the perforated ulcers have been attributed to the bacterium *Helicobacter pylori*.^[3] The prevalence of perforated ulcer is gradually declining, despite the fact that there are still incidents in which it takes place.^[4] Smoking and non-steroidal anti-inflammatory pills (NSAIDs) plays a important roll.^[4] A perforated ulcer may be grouped right into a stercoral perforation which includes some of unique things that motives perforation of the gut wall.

The test had deliberate with the following cause:

- To take a look at the incidence of duodenal perforation in surgical sufferers
- To apprehend the course of treatment
- To have a observe the morbidity and mortality associated with the remedy

Materials & Methodology^[12]

All the patients are informed consent. The 100 duodenal perforation disease sufferers have been enrolled in to the look at. The age of the sufferers are from 20-70 years. The sufferers visited to emergency room of Rajah Muthiah Medical College and Hospital has been taken into consideration within the study. All the affected person's medical history were gathered and routine physical examination done.

In All 100 instances time interval among perforation and surgical procedure are charted. During operation quantity of peritoneal fluid and its character taken under consideration. Site, duration of perforation, duodenal scarring and fibrosis were stated.

Post operatively the patients had been observed with unique reference to the time of oral intake, quantity of postoperative days and the kind of complications were recorded.

Results & Discussion

The facts obtained from the 100 patients have been given as below.

The Table 1 indicate that the maximum patients having perforation of ulcers are from 40-60yrs. In the examine of A.K Dev and S. Paul ^[13] top prevalence of perforation of duodenal ulcer noted in the age of 45-55 ,In another examine by the usage of P.C. Sood and R.L Gupta ^[14] height prevalence are seen in the age of 30 to 40.

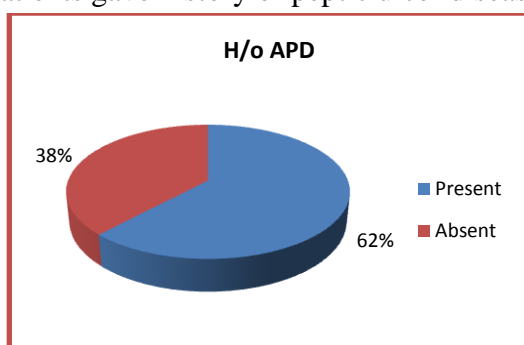
Table- 1: Age Distribution

Age	No. of Case	Percentage (%)
20 - 29 yrs	18	18%
30 - 39 yrs	18	18%
40 - 49 yrs	23	23%
50 -59 yrs	20	20%
> 60 yrs	21	21%

Study showed the previous records of peptic ulcers and possibilities of perforation. 62 patents has superb preceding history of PUD. In the have a look at of P.C. Sood and R.L Gupta ^[14] approximately 78% of sufferers had preceding ulcer history. V.Mourougayan ^[15] observed 76% of sufferers having ulcer history. This examine indicates that 62% of the sufferers had the previous history.

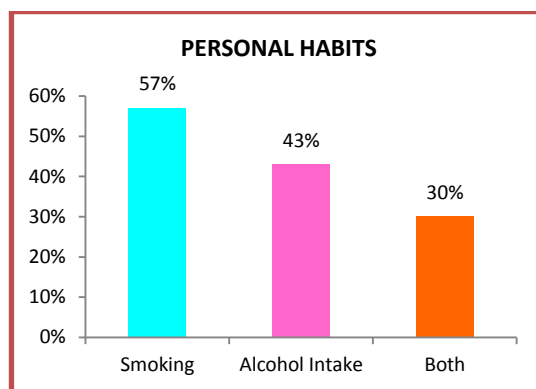
History of Peptic Ulcer Disease

62 patients gave history of peptic ulcer disease



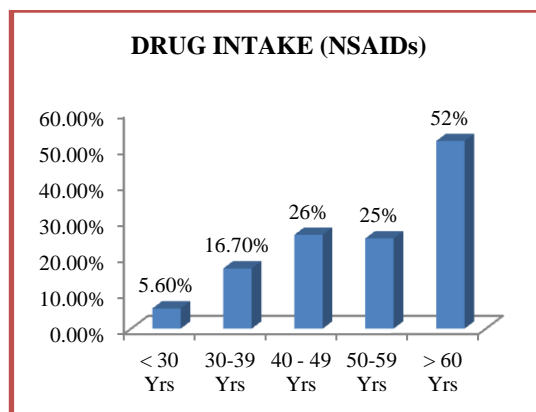
Study indicates that the alcoholism is the primary problem of the perforation. This examine suggests statistics includes 57 sufferers gave records of smoking. 43 patients gave history of alcohol intake.

Personal Habits



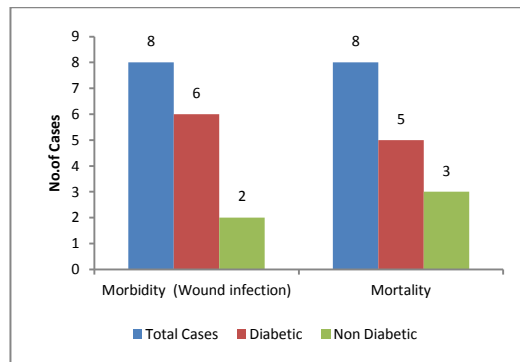
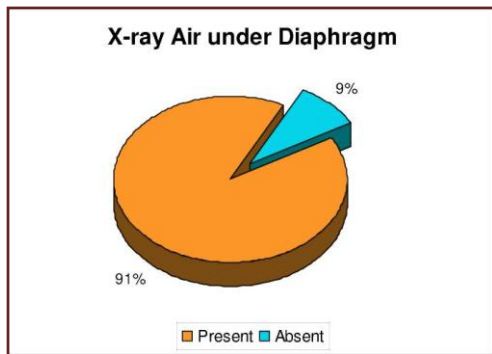
History of Drug Intake (NSAIDS) 26 sufferers gave history of (NSAIDS) drug consumption previous to duodenal ulcer perforation (On a mean those patients took NSAIDS for at least a duration of 1 week, one to two weeks previous to the presentation).

Age	No. of Case	Percentage (%)
< 30 Yrs	1	5.6%
30-39 Yrs	3	16.7%
40 - 49 Yrs	6	26%
50-59 Yrs	5	25%
> 60 Yrs	11	52%



Radiological Signs

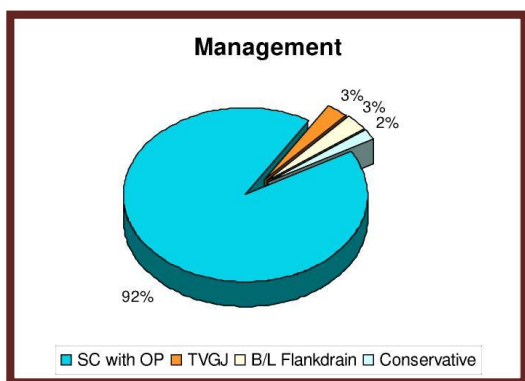
91 patients (90.84%) plain X ray abdomen showed air under diaphragm.



Management

Out of one hundred case admitted

- 90 instances underwent simple closure with omental patch
- 4 instances underwent perforation closure with omental patch at the side of vagotomy with Gastro jejunostomy
- 3 instances have been dealt with with bilateral flank drain underneath nearby anaesthesia due to bad popular condition of the sufferers.
- 3 instances have been managed conservatively



Post Operative Complications

	Total Cases	Diabetic	Non Diabetic
Morbidity (Wound infection)	8	6	2
Mortality	8	5	3

Conclusion

Perforation of the duodenal ulcer is one of the common and lethal complications of the duodenal ulcer. Unless the spark off evaluation is made and early energetic surgical management is executed the mortality can be very high.

Out of 100 cases studied on this series. Perforation maximum occurred in the age group of 40 – 60 yrs. The present indicates that 62% of the patients had previous history of drug intake. Smoking and Alcohol consumption also plays a vital reasons of the perforation.

In Post operative period wound infection was the major morbidity encountered. Of 100 instances who underwent operative management, eight instances had wound infection. Out of which 6 sufferers have been diabetic and 2 affected person non diabetic.

Morbidity Rate: 9.62%

Of overall 100 cases, 8 patients expired because of septicaemia and cardiorespiratory arrest. Out of which 5 patients had been diabetic and 3 affected person non diabetic.

Mortality fee: 11.26%.

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