



“A CLINICAL STUDY ON PROGNOSTIC FACTORS IN DUODENAL ULCER PERFORATION”

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ABSTRACT

AIM This is analytical study to find out the factors that influence the mortality and morbidity among operated cases of duodenal ulcer perforation.

OBJECTIVES This study comprises of prospective analysis of the patients diagnosed with duodenal ulcer perforation in department of general surgery, Trichy SRM Medical college and Research centre during the period from November 2019 to May 2021.

RESULTS AND CONCLUSION As per our study Duodenal ulcer perforation is more common in age group of 40-49 years and Male to female ratio was found to be 16.2:1 NSAID intake cause was 58% The average duration of symptoms was found to be 1.24 days, this is due to most of the patients were managed initially in primary health centres and being referred either delayed. The average time lag between admission and surgery was found to be 3.48 hours, most of the patients needed initial resuscitation initially. In view of improving the general condition of the patient, the patients were made hemodynamically stable and then taken up for surgery hence concluded that the age, associated comorbid conditions, duration of symptoms, clinical condition at the time of presentation all contribute in determining the post op morbidity and mortality

KEYWORDS : duodenal perforation, hollow viscous perforation , morbidity Peptic ulcer, Perforation

INTRODUCTION

Duodenal ulcer perforation is one of the most common acute abdominal emergencies. The purpose of this study is to find out the factors that influence the mortality and morbidity among operated cases of duodenal ulcer perforation. There are multiple number of factors influencing the mortality and morbidity which would be dealt in this study.

AIM OF THE STUDY

Determination of relationship between postoperative morbidity and comorbid illness and pre-operative risk factors in cases of duodenal ulcer perforation

Inclusion Criteria

All non malignant and non-traumatic duodenal ulcer perforation cases above age of 12 years

Exclusion Criteria

Traumatic perforation Perforated malignant ulcers

MATERIALS AND METHODS

This study comprises of prospective analysis of the patients diagnosed with duodenal ulcer perforation in department of general surgery, Trichy SRM Medical college and Research centre during the period from November 2019 to May 2021.

The following data were collected from the hospital records; Age, sex, previous history of ulcer, NSAID intake, duration of symptoms, size of perforation and the amount of peritoneal contamination. The outcome of treatment was elaborated by post operative complications, hospital stay and death.

50 cases of duodenal perforation were studied over a period of 18 months. Of these 50 cases 47 undergone laparotomy, the perforation in all these cases were present in the anterior aspect of 1st part of the duodenum. The patients were treated with perforation closure with live omental patch repair after initial resuscitation and correction of electrolyte imbalances under the cover of broad spectrum antibiotics.

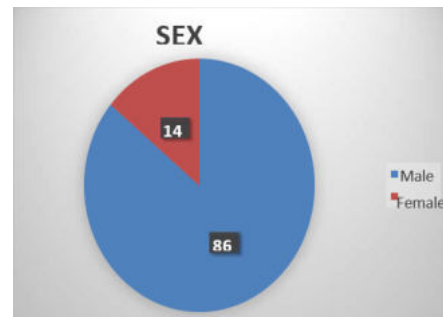
All the patients were continued treatment with anti H.pylori regimen postoperatively.

RESULTS

The observations made were

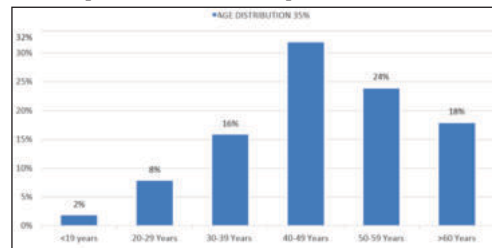
SEX DISTRIBUTION

7 female and 43 male patients were noted Male to female sex ratio is 16.2:1



Age Distribution

Most of the cases were in the more than 40 years age group and 40 to 50 years is the most frequent numbers in them



AGE	No. of Case	Percentage
<19 years	1	2%
20-29 Years	4	8%
30-39 Years	8	16%
40-49 Years	16	32%
50-59 Years	12	24%
>60 Years	9	18%

Personal Habits

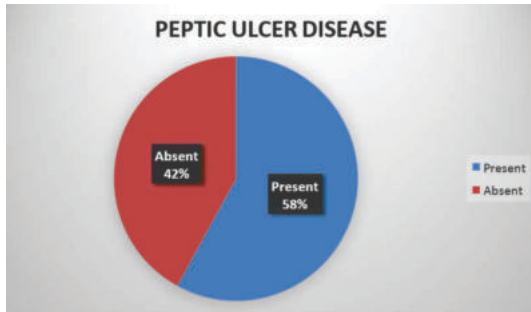


24 patients had smoking history and 19 patients had history of alcohol consumption

Smoking	24	40.7%
Alcohol	19	32.2%
Both	16	27.1%

Peptic Ulcer Disease

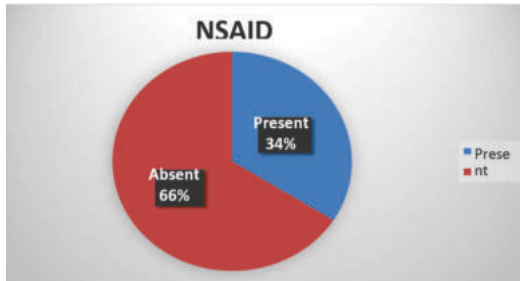
29 patients had the previous history of peptic ulcer disease



Present	29	58%
Absent	21	42%

Nsaid Intake

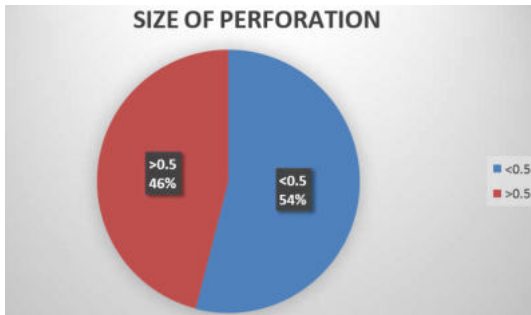
17 patients had the history of NSAIDS intake



Present	17	34%
Absent	33	66%

Size Of The Perforation

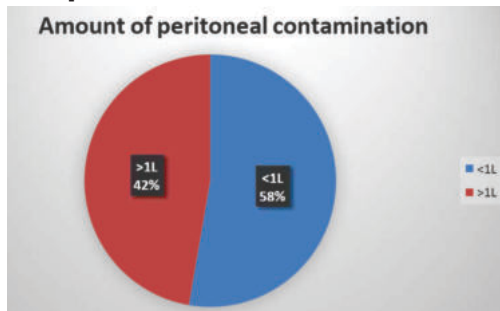
The size of the perforation > 0.5 mm noted in 23 patients



<0.5	27	54%
>0.5	23	46%

Amount Of Peritoneal Contamination

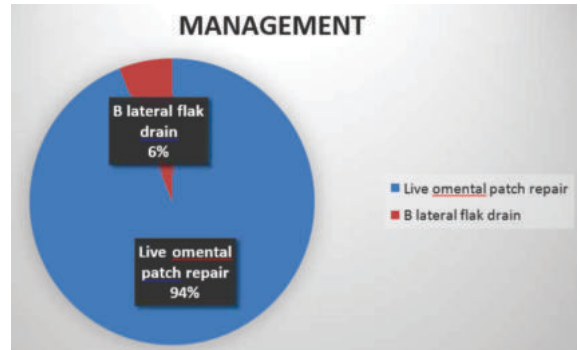
The amount of peritoneal contamination more than 1 litre noted in 29 patients. Less than 1 litre noted in 21 Patients



<1L	29	58%
>1L	21	42%

Management

- Out of 50 Patients
- 47 cases were treated with simple closure with omental patch
- 3 cases were treated with B/L flank drain under local anaesthesia because of poor general condition of the patient



Live omental patch repair	47	94%
Bilateral flak drain	3	6%

Duration Of Symptoms

- Average duration of symptoms was found to be 1.24 Days (1-4 Days)

Delay

- Average delay from the time of admission to surgery is 3.48 Hours 2- 6Hours)

Hospital Stay

- Average duration of hospital stay found to be 8.52 (8-15 Days)

Post-operative Complications

- Of total 47 cases had underwent surgery, 8 Patients had wound infection
- 3 patients had septicaemia
- Electrolyte abnormalities were encountered in 21% of patients
- Morbidity rate: 17.02%.

Mortality

- Of total cases 50, 6 Patients expired due to septicaemia
- Mortality rate:12%

CONCLUSION

- Duodenal ulcer perforation is more common in the age group of > 40 years
- Majority of the patients are male
- Associated risk factors include smoking, alcohol intake, NSAID intake, and history of APD
- Morbidity rate is 17% and wound infection and dyselectolytaemia is the most common
- Mortality rate is 12%
- Mortality and morbidity are significantly higher in patients with comorbid illness.
- age, associated comorbid conditions, duration of symptoms, clinical condition at the time of presentation all contribute in determining the post op morbidity and mortality
- Prognostic indicators can assist in risk stratification for perforated peptic ulcers. The use of this system can help delineate high risk patients and to identify the need of early intervention and prompt treatment for better outcome of the patient.

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