

# Evaluation of Clinical Presentation of Common Gastric Disorders

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## ABSTRACT

**Introduction:** Pain in abdominal region is one of the most common reasons for emergency visits to the hospital. However, signs and symptoms differ in people. Hence present study was undertaken to study symptomology and clinical presentation of common gastric disorders.

**Material and Methods:** The present prospective study comprised of 100 patients reported with complaint related to gastric disorders. Demographic details, personal history, clinical history, type of pain, associated symptoms were noted. Data obtained was arranged accordingly using the SPSS Version 17 software and was tabulated as a number and percentage of respondents.

**Results:** Patients in the age group of 31-40 years of age suffered more of gastric problems, followed by in age group 41-50 years and 21-30 years of age; 62 patients had habit of smoking and 20 had habit of alcohol intake. 72 patients reported pain in epigastrium region, 20 in right hypochondrium, 2 in left hypochondrium and 6 in periumbilical region. The most common associated symptoms were vomiting and retrosternal pain.

**Conclusion:** The treating physician have a responsibility to differentiate between life threatening surgical emergencies and self-limiting processes. Stress, lifestyle, eating habits of the patient are the risk factors of gastric disorders.

**Keywords:** Gastric disorders; Lifestyle; Smoking; Stress

## INTRODUCTION

Pain in abdominal region is one of the most common reasons for emergency visits to the hospital. Even though for many patients, symptoms are usually benign and self-limited, a subset must be diagnosed with an acute abdomen because of serious intra-abdominal pathology that necessitates emergency intervention.<sup>1</sup> Acute abdominal pain or acute abdomen is defined as tremendous severe pain arising in the abdomen region caused by surgical or non-surgical problems that needs immediate care. In view of this, the clinicians, particularly those providing primary health care must be able to recognize the reason of pain as either surgical or non-surgical case.<sup>2</sup> Some people who have gastric disorders have pain or discomfort in the upper part of the abdomen. However, signs and symptoms differ in people.<sup>3</sup> Hence present study was undertaken to study symptomology and clinical presentation of common gastric disorders.

## MATERIAL AND METHODS

The present prospective study consisted of 100 patients reported with chief complaint related to gastric disorders. The study was carried out at Pramukhswami Medical College, Karamsad. Ethical approval was obtained and informed consent from patients were obtained. Demographic details, personal history, clinical history, type of pain, associated symptoms were noted. Symptoms of pain in epigastrium right hypochondrium, left hypochondrium and umbilical region were considered.

Associated symptoms like nausea, vomiting, dysphagia, anorexia, hematemesis, dyspepsia were also considered.

## STATISTICAL ANALYSIS

Data obtained was arranged accordingly using the SPSS Version 17 software and was tabulated as a number and percentage of respondents.

Table-1 shows data of patients distributed according to age with maximum patients i.e. 28 in age group of 31-40 years of age, 26 patients in age group 41-50 years of age, 24 in 21-30 years of age, 14 in 51-60 years of age. 74 patients were male and 26 female (Table-2). 62 patients had habit of smoking and 20 had habit of alcohol intake (Table-3).

Table-4 shows distribution of pain, 72 patients reported pain in epigastrium region, 20 in right hypochondrium, 2 in left hypochondrium and 6 in periumbilical region. 60 patients reported burning type of pain, 2 colicky type, 38 reported dull ache, 24 continuous, 76 intermittent type, 52 reported that pain aggravated by meal, 22 reported that pain relieved by meal and in case of 26 patients no reaction of pain to meal was found (Table-5). The associated symptoms were vomiting in 52 patients, hematemesis in 8, melena in 8, anorexia in 20, weight loss in 20, retrosternal pain in 46, fullness after meal in 30, sour eructations in 40, water brash in 10 and hiccoughs in 4 (Table-6).

## DISCUSSION

Acute abdominal pain can be a symptom of spectrum of conditions from benign and self-limited disease to surgical emergencies. Evaluating abdominal pain needs an approach that depends on physical examination, patient history, laboratory tests along with imaging studies. The location of pain provides a clue and further guides in diagnosis.<sup>4</sup> Thus, the present study aimed to study symptomology and clinical presentation of common gastric disorders. Regarding clinical presentation of gastric disorders according to age, it was found that maximum patients were in age group of 31-40 years of age, followed by age group of 41-50 years and 21-30 years of age. According to the survey conducted by the American Psychological Association on the topic Stress in America, the highest levels of stress was reported in young adults aged 18-33 years as compared to other groups tested. Health professionals reported that this age group suffers from depression as well as anxiety disorders. People aged 18-47 reported that work, job stability and money were their main goals and were resulting in significant amounts

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No.	Age group in year	No.	Percentage
1	1-10	-	-
2	11-20	2	2
3	21-30	24	24
4	31-40	28	28
5	41-50	26	26
6	51-60	14	14
7	61-70	4	4
8	>71	2	2
Total		100	100

**Table-1:** Distribution of patients according to age

Gender	No.	Percentage
Male	74	74
Female	26	26
Total	100	100

**Table-2:** Distribution of patients according to gender

No.	Habit	No.	Percentage
1	Smoking	62	62
2	Alcoholic	20	20
3	Non- Smoker	80	80
4	Non- Alcoholic	38	38

**Table-3:** Personal Habits of patients

No.	Site of pain	No.	Percentage
1	Epigastrium	72	72
2	Rt. Hypochondrium	20	20
3	Lt. Hypochondrium	2	2
4	Periumbilical	6	6

**Table-4:** Distribution of pain

No.	Character of pain	No.	Percentage
1	Burning	60	60
2	Colicky	2	2
3	Dull ache	38	38
4	Continuous	24	24
5	Intermittent	76	76
6	Aggravated by meal	52	52
7	Relieved by meal	22	22
8	No reation to meal	26	26

**Table-5:** Character of pain

No.	Complaints	No.	Percentage
1	Vomiting	52	52
2	Hemetemesis	8	8
3	Malena	8	8
4	Anorexia	20	20
5	Weight loss	20	20
6	Retrosternal pain	46	46
7	Fullness after meal	30	30
8	Sour eluctations	40	40
9	Water brash	10	10
10	Hiccoughs	4	4

**Table-6:** Associated Symptoms

of stress to their lives.<sup>5</sup> Regarding the relation between stress and gastrointestinal diseases, the central nervous system and the gut are intimately connected, due to which exposure to stress

leads to various symptoms within the gastrointestinal tract such as abdominal pain, dyspepsia or diarrhoea. The first observation conducted by William Beaumont on the wounded soldier with gastric fistula showed that fear or anger significantly influences physiology of gastric system, especially secretion of acid.<sup>6</sup>

In the present study, 62 patients had habit of smoking and 20 had habit of alcohol intake. Smoking damages the lining of the esophagus, making it extra-sensitive to acid, according to the National Digestive Disorders Information Clearinghouse. Smokers are two times more likely as compared to nonsmokers to develop ulcers, painful open sores that form on the stomach or duodenum. Smoking inhibits production of bicarbonate which protects the lining of the duodenum from acid and also promotes infections of *Helicobacter pylori*, one of the main cause of ulcers.<sup>7</sup> Alcohol passes through the various segments of the gastrointestinal (GI) tract and interferes with the function of GI-tract segments. It can impair the function of the muscles separating the esophagus from the stomach, thus causing heartburn. In the stomach, alcohol interferes with the activity of the gastric muscles surrounding the stomach, may impair the muscle movement in the intestines, resulting in diarrhea frequently found in alcoholics. Besides, alcohol also inhibits the absorption of nutrients in the small intestine and enhances the transport of toxins across the intestinal walls, which may result in alcohol-related damage to the liver and other organs. Thus, the present study found that lifestyle and personal habits play an important role in gastric disorders.<sup>8</sup>

The location and the type of abdominal pain may help health professionals in establishing the diagnosis.<sup>2</sup> The present study found vomiting as the most reported complain of gastric problems followed by retrosternal pain, sour eluctations, fullness after meal, anorexia, weight loss, water brash, malena, hemetemesis and hiccoughs. Vomiting is a common early complaint of acute abdominal pain. However, bowel obstruction should be considered when there is progressive and continuous vomiting accompanied with severe abdominal pain. Anorexia occurs in causes of acute abdomen, particularly acute appendicitis and acute cholecystitis. Abdominal pain, accompanied with abdominal distention due to excessive gas, should be considered as a sign of ileus or bowel obstruction.<sup>2</sup> The treating physician have a responsibility to distinguish between a self-limiting process, like constipation or viral gastroenteritis from more life threatening surgical emergencies like such as intestinal obstruction and appendicitis.<sup>9</sup>

## CONCLUSION

Although acute abdominal pain have self-limited conditions, the pain may be an indication of a surgical or medical emergency. The challenge faced by the health services includes timely diagnosis so that treatment can be initiated accordingly and thus morbidity can be prevented. Stress, lifestyle, eating habits of the patient are the risk factors of gastric disorders.

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