

## Assessment of Risk Factors in Patients Presenting With Gastritis at Services Hospital Lahore

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### ABSTRACT

**Objective:** To identify the common risk factors causing and worsening gastritis.

**Study design:** Cross sectional survey.

**Setting:** Medical Unit 2, Services Hospital, Lahore

**Duration:** The study was completed over a period of six months, from November 2008 to May 2009.

**Subjects and methods:** Hundred patients with upper gastrointestinal symptoms were selected. All patients were subjected to upper GI endoscopy and biopsy for confirmation of gastritis.

**Results:** The results of this study showed that gastritis is present on endoscopy in 83% of patients. 71% were infected with H. Pylori. Mostly patients were effected in 4<sup>th</sup> and 5<sup>th</sup> decade. Males were 47% while 53% were female. All denied alcohol intake. 31% were smoker. 65% were taking NSAID regularly. 66% had preference for spicy food while 55% were taking tea.

**Conclusion:** The findings of this study showed that gastritis is common lesion in dyspeptic patients and among various risk factors H. Pylori is commonest organism found while NSAID is also strong risk. So all the patients presenting with symptoms must be eradicated for H. Pylori. Detailed enquiry should be done for other risk factors so could be modified. Regular use and over the counter use of NSAID must be prohibited. If required at all safe one be selected on sos basis.

**Key words:** Gastritis, endoscopy, histopathology.

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### INTRODUCTION

Gastrointestinal problems are a common cause for attendance at primary health care units as well as referrals to tertiary care centers in developed countries. Similarly poor sanitation, poor hygiene and poor standards of living contribute to large magnitudes of GI problems in developing countries<sup>1</sup>.

Approximately 80% of upper gastrointestinal endoscopies are performed for the investigation of dyspepsia. Since "Gastritis" is common lesion so attempt has been made to identify risk factors to prevent its complications by treatment of associated risk factors.

H. Pylori is commonest organism invading stomach mucosa leading to inflammation and ulcer. NSAID causes gastritis by inhibiting COX.1 enzyme for synthesis of eicosanide which increases possibility of ulcer if used regularly. Alcohol causes erosion of stomach mucosa directly. Smoking and caffeine also causes damage to epithelium and excessive use can lead to gastritis and ulcer formation. Although spicy food causes acute burning sensation but it irritate temporarily and not causing direct damage to stomach mucosa.

Clinical implication of the study is that as endoscopy and histopathology facilities are not available in remote health care centers in our country

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so patients presenting with dyspeptic symptoms must be questioned about the risk factors. They should be treated and educated for modification of these risk factors. If not responding to appropriate treatment than referred for endoscopy and biopsy for any other condition.

### SUBJECTS AND METHODS

Hundred patients with upper gastrointestinal symptoms were selected. All patients were subjected to upper GI endoscopy and biopsy for confirmation of gastritis and for detection of H. Pylori. Male & female patients between 13 – 70 years of age and patients presenting with one or more of the following upper gastrointestinal symptoms such as nausea, vomiting, epigastric discomfort, pain, dyspepsia, eructation, heartburn, water brash were included in the study. All the patients of chronic liver disease and with previously endoscopically diagnosed upper gastrointestinal lesions were excluded.

All patients visiting Medical Unit-II with upper gastrointestinal symptoms were enrolled as per inclusion and exclusion criteria. All patients were subjected to Gastroscopy. histopatolology done for confirmation of gastritis and H.pylori testing done. Rest of risk factors were Assessed by questionnaire. Data was analyzed by SPSS version 11.

## RESULTS

Out of 100 patients, 53(53%) were females and 47(47%) were males. The age of patients ranged between 25 to 70 years with a mean age of  $48.54 \pm 10.35$  years. So majority of patients were in the 4<sup>th</sup> & 5<sup>th</sup> decades (75%). H. Pylori was found in 71% of patients while 66% had preference for spicy foods and 65% taking NSAIDS. 31% were smoker.

Table 1: Sex wise distribution of studied cases

Sex	Frequency	%age
Male	47	47.0
Female	53	53.0
Total	100	100.0

Table 2. Age groups of studied cases.

Age in years	Frequency	%age
25 to 34	8	8.0
35 to 44	21	21.0
45 to 54	37	37.0
55 to 64	26	26.0
65 & above	8	8.0

Table 3. Risk factors for gastritis (n=100).

Risk factors	Frequency	%age
Smoking	31	31
Alcohol intake	0	0
NSAID intake	65	65
Spicy foods	66	66
H. Pylori	71	71

## DISCUSSION

Since gastritis is the most common lesion seen in the stomach, an attempt has been made in this study to determine the risk factors for gastritis so its complications such as peptic ulcers or gastric neoplasm can be prevented.

Regarding age most patients were in 4<sup>th</sup> and 5<sup>th</sup> decade with mean of 48 years. Other studies also show that gastritis is common in the same age group as ours. In another study at DHQ Rawalpindi demographic features showed 67% males and 33% females. This could be because at district health care level females might have less access to health care facilities. Mean age was 36 years. The difference could be explained by the fact that separate pediatric endoscopic facilities were available at our tertiary health care center. This demographic picture reveal that in this active life period gastritis can affect the daily activities and if not treated they are at increased risk of developing complications.

In our study 31% of patients admitted smoking in moderate amount while none admitted for alcohol intake. This could be because of social set up that these factors are less common or absent or they are not giving correct information. 65% of patients were using NSAIDS regularly for generalized body aches

and pains and arthralgias. Over the counter availability of these drugs is the cause of there use without consultation with physician. We can prevent it if the underlying condition for its use is treated appropriately and if required at all safe one on sos basis should be used. Moreover patients must be educated regarding their condition and hazard of regular NSAID intake. The most common cause found is H. Pylori in 71% of patients. This could be because of poor sanitation and poor standard of living as well as sharing of utensils like spoon as with GERD in H. Pylori infected patients organism may reach in oral cavity. So all patients must be tested by non invasive serological testing rather than waiting for endoscopy and biopsy. Eradication therapy should be given so complication could be prevented. 66% of our patients were taking spicy food while 55% are consuming caffeine in form of tea.

## CONCLUSION

All patients presenting with dyspepsia at any health care sector must be evaluated in detail for possible risk factors and must be tested serologically for H. pylori so it could be eradicated. Risk factors must be modified which need mass education of our population regarding dietary habits and regular NSAID use by this we can prevent complications of gastritis and excessive endoscopy and biopsy which is invasive procedure and require expertise, which are not possible in our country where health facilities are not upto the mark. Only those patients should be referred for endoscopy and biopsy which are not responding to treatment.

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