IS BIOPSY NEEDED IN EVERY GASTRITIS FOUND DURING ENDOSCOPY?

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ABSTRACT

Objective: To find out concordance between endoscopic and histological diagnosis of gastritis in dyspeptic patients.

Methodology: All dyspeptic patients who underwent upper gastrointestinal endoscopy with endoscopic diagnosis of gastritis and available biopsy report from July 2006 to June 2008 in Hamdard Medical University Hospital and different private hospitals of Karachi were included in this study. The endoscopist formed a global impression on the presence or otherwise of gastritis according to the Sydney System. Patients with ulcer, growth and any other endoscopic diagnosis apart from gastritis were excluded. With standard biopsy forceps, minimum of two gastric biopsies from inflamed mucosa were taken for histological evidence of gastritis.

Results: Total 112 patients (44 males and 68 females) were included in the study with mean age of 41.95 years. Most common symptom experienced by patients was epigastric discomfort in 103 (92%) of patients. In all patients endoscopic diagnosis was gastritis. Biopsy reports showed chronic gastritis in 109 (97.3%) patients.

Conclusion: There is good concordance of endoscopic findings of gastritis with histological evidence of gastritis and thus biopsy is not required in every case of gastritis.

KEYWORDS: Endoscopic gastritis, Dyspepsia, Biopsy, Histology.

INTRODUCTION

Dyspepsia is a common condition that is reported from 19% to 41% of the general population.1 About one out of every four subjects with dyspepsia consults his general practitioner and these accounts for 1-4% of all consultations in primary care.2,3 Dyspepsia is defined as an upper gastrointestinal symptom complex characterized by epigastric pain or discomfort and may include heartburn, acid regurgitation, excessive burping/belching, abdominal bloating, feeling of abnormal or slow digestion, early satiety or nausea.4 Management requires whether to arrange initial investigation by endoscopy or barium X-ray before starting therapy, to ‘test and eradicate’ Helicobacter pylori (H. pylori) infection or to start empirical symptomatic
therapy. In practice, empirical anti-secretory treatment is commonly the first step unless the patient has new onset symptoms and is older or has alarm features (vomiting, gastrointestinal bleeding, abdominal mass, dysphagia, unexplained weight loss and anaemia), despite concerns that this approach may miss clinically significant upper gastrointestinal tract lesions.\(^4\)\(^5\) Most of the time patient is referred for upper GI endoscopy & it is a common practice for endoscopists to make judgements on the presence or absence of gastritis on the basis of the endoscopic appearance of the gastric mucosa.\(^8\) The concept of “endoscopic gastritis” was given further acceptance by the acknowledgement of its existence by the working party that formulated the Sydney System of classifying gastritis.\(^7\) While doing endoscopy it is customary to take biopsy of inflammed mucosa in order to confirm the endoscopic findings & to test for H. pylori infection. The practical role of gastric biopsy in the management of gastritis is controversial.

Overall, endoscopic examinations are 2-dimensional and performed in-situ whereas histological examination are pinpoint and performed on in-vitro specimens, which is the reason for discrepancies in diagnosis.\(^8\) Numerous studies have shown that there is low concordance between endoscopy and histology with regard to the diagnosis of gastritis\(^9\)\(^10\) while some other studies have suggested that the concordance is good.\(^11\)\(^12\)

In Pakistan like many developing countries facilities for endoscopy are not so commonly available to our vast majority of patients. In those cases where endoscopy is performed and gastritis was diagnosed, doing routine biopsy is a costly procedure for most of our poor patients. Also there are chances of infecting patients with hepatitis with this invasive procedure, which causes a breach in mucosa as compared to simple visual endoscopy. The objective of this study was to find out the concordance between endoscopic and histological diagnosis of gastritis.

**METHODOLOGY**

All dyspeptic patients who underwent upper GI endoscopy with endoscopic diagnosis of gastritis and available biopsy report were included in this retrospective study from July 2006 to June 2008 in Hamdard University Hospital and different private hospitals of Karachi. Endoscopy was performed by the conventional method after six hours of fasting prior to the procedure under throat anaesthesia with 4% xylocaine spray. Intravenous sedation with midazolam was used selectively.

The endoscopist formed a global impression on the presence or absence of gastritis according to the Sydney System (oedema, erythema, friability, exudates, erosions, rugal hyperplasia and atrophy, visibility of vascular pattern, intramural bleeding spots and course nodularity) in the antrum and body of the stomach.\(^7\) Patients with ulcer, growth and any other endoscopic diagnosis apart from gastritis were excluded. With standard biopsy forceps, at least two gastric biopsies from the inflammed mucosa of the antrum were taken for histological evidence of gastritis.

**RESULTS**

Total 112 patients (44 males and 68 females) were included in the study. Mean age of the patients was 41.95 years (Range 15-68). Mean duration of symptoms was 2.1 years (Range: 0.3-20). The most common symptom experienced was epigastric discomfort in 103 (92%) of patients. In all patients the endoscopic diagnosis was chronic gastritis. Biopsy reports showed chronic gastritis in 109 (97.3%) patients Table-I.

**DISCUSSION**

Upper gastrointestinal diseases are leading causes of morbidity and mortality globally. Among diagnostic modalities, endoscopy holds an important role. It enables visualization, photography, ultrasonography, and biopsies of suspicious lesions and also facilitates the perfor-

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Table-I: Findings of endoscopy and biopsy report

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<td>Endoscopic diagnosis of gastritis</td>
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<td>Biopsy reporting gastritis</td>
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The complete disinfection procedure in 19 patients with chronic replicative hepatitis of the endoscopes by hepatitis C virus. A study reported 100% frequency of contamination of the endoscopes. An endoscopy, selective use of biopsy.

We encounter large number of infections with gastroenterology hospital service. Rev Med Liege 1993;254:641-4.

The biopsy-forceps are PCR positive in 6% of cases. The infected gastric juice may play a role in the contamination of the endoscopes. Another study reported 100% frequency of contamination of the endoscopes by hepatitis C virus in 19 patients with chronic replicative hepatitis C. The complete disinfection procedure seems effective to eliminate HCV but cannot guarantee complete disinfection all the time especially in our setup with overall poor quality control. Endoscope reprocessing is a multi-stepped process that renders a contaminated endoscope safe for reuse. Its steps include meticulous cleaning, complete immersion in a liquid chemical sterilant (LCS) or disinfectant to achieve high-level disinfection (or “liquid sterilization”), water rinsing, and proper handling and storage. We encounter large number of unscreened hepatitis patient in our practice and we can minimize the chances of infecting normal patient with this chronic disease by selective use of biopsy.

Limitations of the study: Only patient with endoscopic gastritis were included in the study. To find the sensitivity and specificity of endoscopic gastritis, biopsy should be required for patient with normal macroscopic changes. But in clinical practice we didn’t take any biopsy of normal looking mucosa.

CONCLUSION

There is good concordance of endoscopic findings of gastritis with histological evidence of gastritis. Biopsy is not required in every case of gastritis. More work is required about biopsy findings in dyspeptic patients with normal looking mucosa to generalize our findings.

REFERENCES