



UPPER GASTROINTESTINAL TRACT ENDOSCOPIC BIOPSIES.

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ABSTRACT

Introduction: Upper GI Upper gastrointestinal tract is an important site for wide variety of lesions especially malignant tumors. Endoscopy in combination with endoscopic biopsy plays an important role in the diagnosis of upper gastrointestinal tract neoplasms and therefore aids in their early management.

Aims and objective: This study was done to determine the histopathologic spectrum of Upper Gastrointestinal Tract Mucosal Biopsies.

Materials and methods: A prospective study of upper GI endoscopic biopsy was carried out in a tertiary care hospital over a span of one year. 55 biopsy samples were subjected to histopathological examination.

Results: Among the 55 endoscopic biopsies- Oesophageal biopsies were 25 (45.45%), gastric biopsies were 18(32.7%) and duodenal biopsies were 12 (21.8%). Out of 55 cases, 35 (63.63%) were males and 20 (36.36%) were females with a male to female ratio of 1.75:1. Biopsies comprised of 42 (76.3%) non neoplastic cases and 13(23.6%) neoplastic cases. Among the 13 neoplastic cases, 08 cases were from oesophagus and 05 cases from stomach. All the 08 esophageal malignancies were squamous cell carcinoma and all the 05 gastric malignancies were adenocarcinoma.

Conclusion: We conclude that Histopathological analysis of gastrointestinal lesions aids the clinicians for follow up and specific treatment and provides a powerful diagnostic tool for better patient management.

KEYWORDS : endoscopy, biopsy, upper gastrointestinal tract.

INTRODUCTION:

The upper gastrointestinal flexible fiber optic endoscope was first used in 1968 and proved to be a major breakthrough in the diagnosis of gastrointestinal tract (GIT) lesions. Before the advent of endoscopy direct access to the lesion of the gastrointestinal tract for the confirmation of the diagnosis was difficult, this posed difficulty in contemplating adequate and appropriate surgery. Endoscopy as a diagnostic and therapeutic tool has grown in recent years.² Upper GI Upper gastrointestinal tract is an important site for wide variety of lesions especially malignant tumors. Endoscopy in combination with endoscopic biopsy plays an important role in the diagnosis of upper gastrointestinal tract neoplasms and therefore aids in their early management.³ This study was done to determine the spectrum of histopathological lesions of upper gastrointestinal tract.

MATERIALS AND METHOD:

Fifty five endoscopic mucosal biopsies were evaluated in a prospective study done in our hospital for a span of one year. Patients of all ages and both sexes with upper GI symptoms underwent endoscopic examination and biopsies were taken. All the biopsy samples were immediately put in 10% neutral buffered formalin followed by histopathological examination of the tissue.

RESULTS:

In our study, oesophageal biopsies were 25 (45.45%), gastric biopsies were 18(32.7%) and duodenal biopsies were 12 (21.8%) out of total 55 endoscopic biopsies. Out of 55 cases, 35 (63.63%) were males and 20 (36.36%) were females with a male to female ratio of 1.75:1. Age of the patients ranged from 15 – 85 years. The youngest patient was a 16 year old male with acute nonspecific gastritis and the oldest patient was 84 year female with squamous cell carcinoma of oesophagus. Biopsies comprised of 42 (76.3%) non neoplastic cases and 13(23.6%) neoplastic cases. Among the 13 neoplastic cases, 08 cases were from oesophagus and 05 cases from stomach. All the 08 esophageal malignancies were squamous cell carcinoma (SCC), out of these 05 (62.5%) cases were of well differentiated squamous cell carcinoma, 02 (25%) cases of moderately differentiated SCC and 01(12.5%) case of poorly differentiated SCC. All the 05 gastric malignancies were diagnosed as adenocarcinoma, out of these 03 cases (60%)

were well differentiated adenocarcinoma, 01 case (20%) each of moderately differentiated adenocarcinoma and signet ring carcinoma.

Table 1: Histopathological findings in upper GI biopsies

LESIONS	No Of Cases	Percentage
Esophagus		
Chronic non specific esophagitis	05	9.09
Barrets Esophagus	05	9.09
Squamous cell Carcinoma	08	14.5
Dysplasia	03	5.45
No Specific Pathology	04	7.27
Stomach		
Chronic Non Specific Gastritis	04	7.27
Acute Non Specific Gastritis	02	3.63
Eosinophilic Gastritis	02	3.63
Gastric ulcer	03	5.45
Adenocarcinoma	05	9.09
No specific pathology	02	3.63
Deodenum		
Non Specific Duodenitis	05	9.09
Duodenal Ulcer	04	7.27
No specific Pathology	03	5.45

DISCUSSION:

Male to female ratio was 1.75:1 in our study. This was in accordance to the study done by Krishnappa Rashmi et al⁴ where male to female ratio was 2.03:1. In our study, the majority (45.45%) of the endoscopic biopsies were carried from oesophagus. This was in contrast to the study done by Shennak MM et al⁵ where majority of the biopsies were from stomach. Biopsies comprised of 42 (76.3%) non neoplastic cases and 13(23.6%) neoplastic cases. This was in accordance to the study done by Rosy khandelia et al⁶ where biopsies comprised of 78 (67.8%) non neoplastic cases and 37(32.1%) neoplastic cases. All the 08 esophageal malignancies were squamous cell carcinoma (SCC) and all the 05 gastric malignancies were diagnosed as adenocarcinoma in our study. This was in accordance to the study done by Syed Imtiyaz Hussain et al³ where most of the biopsies from oesophagus were squamous cell carcinoma and gastric biopsies were adenocarcinoma.

Conclusion: A variety of non-neoplastic and neoplastic lesions were reported in the present study across a wide range of age and site distribution. Thus, the role of upper gastrointestinal mucosal biopsies for the histopathological identification of the various gastrointestinal lesions by endoscopy allows an early therapeutic decisions without unnecessary delay. We conclude that biopsy of upper gastrointestinal lesions helps in early detection of mucosal lesions and diagnosis of the carcinomas at early stage leading to early clinical management.

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