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HISTOPATHOLOGICAL LESIONS OF UPPER GASTROINTESTINAL TRACT

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Abstract:

OBJECTIVE: To determine the histopathological lesions of upper gastrointestinal tract

PATIENTS AND METHODS: The present cross sectional study included endoscopic biopsies of upper GIT from patients at tertiary care hospital. The brief clinical data were recorded; the inclusion criteria were the patients of age ≥ 18 years either gender presented with abdominal pain and discomfort, dyspepsia, malena and haemetemesis were explored and included in the study while the frequency / percentages (%) and means \pm SD computed for study variables.

RESULTS: During six month study period total fifty patients had upper gi endoscopy and were explored thoroughly. the frequency for male and female population was 30 (60%) and 20 (40%) with mean \pm SD for age of male and female individuals was 52.66 ± 7.77 and 50.99 ± 5.99 respectively. male 30 (60%) and female 20 (40%), regarding endoscopic biopsies esophagus 14 (28%), gastro-esophageal junction 11 (22%), stomach 13 (26%), duodenum 12 (24%) while regarding non-neoplastic lesions gastritis 07 14, granulomatous lesion 04 (8.0%) dysplasia 06 (12%), polyp 02 (4.0%) whereas regarding the neoplastic lesions squamous cell carcinoma 08 (16%), adenocarcinoma 10 (20%), adenosquamous carcinoma 07 (14%), non-hodgkin's lymphoma 06 (12%).

CONCLUSION: The non-neoplastic lesion comprises gastritis, granulomatous lesion, dysplasia and polyp while the most common neoplastic lesions were squamous cell carcinoma, adenocarcinoma, adenosquamous carcinoma and non-Hodgkin's lymphoma.

KEYWORDS: Gastritis, Malignancy and Gastrointestinal.

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INTRODUCTION:

Upper GI endoscopy (EGD) is a visual examination of the upper intestinal tract using a lighted, flexible fiberoptic or video endoscope [1]. EGD is the definitive modality for the evaluation of a wide variety of upper GIT symptoms & diseases including malignancy [2]. When EGD is performed to evaluate a specific symptom & an etiological structural lesion is observed, the decision to biopsy is straightforward [3]. Examination of specimens obtained at endoscopy by a qualified pathologist is a routine & critical part of managing patients with disorders of the alimentary tract [4]. Endoscopy is recommended as the first investigation in the workup of a patient with dyspeptic symptoms. The most commonly reported endoscopic abnormalities are gastric ulcer, duodenal ulcer & gastric malignancy [5]. GERD has been the focus of dynamic research in the Asia-Pacific region in the last few years. Many patients of clinical diagnosis of GERD or having epigastric pain do not show any abnormality on endoscopic examination. In such patients, histopathology could provide the diagnosis as esophageal biopsy is reasonably sensitive in diagnosing reflux disease in the absence of endoscopic findings [6]. It has been observed that dyspepsia is common in Asian population especially in young age and there is an overlap of symptoms of functional dyspepsia, IBS & GERD. All of these lesions are detected late in the course of the disease as the patients are either asymptomatic or present with mild, non-specific symptoms. Thus, early detection by

endoscopic biopsies, especially of malignancies greatly improves the survival rate in our population by initializing the appropriate management strategies.

PATIENTS AND METHODS:

The present cross sectional study included endoscopic biopsies of upper GIT from patients at tertiary care hospital. The brief clinical data were recorded; the inclusion criteria were the patients of age ≥ 18 years either gender presented with abdominal pain and discomfort, dyspepsia, melena and haematemesis were explored and included in the study. All the relevant patients had thorough clinical examination and planned for upper GI endoscopy to explore the lesions while the exclusion criteria were the healthy individuals, patients presented with lesions in the oral cavity & oropharynx and the non cooperative patients not interested to participate in the study while the endoscopic biopsy specimens thus obtained were fixed in 10% formalin stained with haematoxylin & eosin. The data was collected on proforma while analyzed in SPSS to manipulate the frequencies, percentages and mean \pm SD.

RESULTS:

During six month study period total fifty patients had upper GI endoscopy and were explored thoroughly. The frequency for male and female population was 30 (60%) and 20 (40%) with mean \pm SD for age of male and female individuals was 52.66 ± 7.77 and 50.99 ± 5.99 respectively. The demographical and clinical profile of study population is presented in Table 1.

TABLE 1: THE DEMOGRAPHICAL AND CLINICAL PROFILE OF STUDY POPULATION

Parameter	Frequency (N=50)	Percentage (%)
AGE (yrs)		
20-29	04	8.0
30-39	11	22
40-49	17	34
50-59	11	22
60+	07	14
GENDER		
Male	30	60
Female	20	40
Endoscopic biopsies		
Esophagus	14	28
Gastro-esophageal Junction	11	22
Stomach	13	26
Duodenum	12	24
NON-NEOPLASTIC LESIONS		
Gastritis	07	14
Granulomatous lesion	04	8.0
Dysplasia	06	12
Polyp	02	4.0
NEOPLASTIC LESIONS		
Squamous cell carcinoma	08	16
Adenocarcinoma	10	20
Adenosquamous carcinoma	07	14
Non-Hodgkin's lymphoma	06	12

DISCUSSION:

Upper gastro-intestinal symptoms like dyspepsia, dysphagia, vomiting, abdominal pain, etc are a very common cause of discomfort among patients & form the common reasons for referral to the endoscopy department [7]. The modern endoscope has evolved from a rigid hollow metal tube to a light, flexible fiberoptic system using self illumination. It not only allows the inspection of the GIT, but also permits ease of access to suspected tissue areas with the aid of a biopsy forcep [8]. Endoscopy, when combined with biopsy is an easy, minimally invasive & cost effective procedure when it comes to arriving at a specific diagnosis of a patient with non-specific symptoms [9]. The findings of current series are similar to the study done by Wei WQ et al [10] and also similar to Pedram A, et al where the peak age was found to be 61.8 years [11]. Gastric adenocarcinomas including signet ring types were more common while Ozoran Y et al found a higher incidence in 3rd & 4th decades [12]. The most common lesion of the stomach was

found to be adenocarcinoma followed by gastritis, dysplasia & polyp. The adenocarcinomas were commonly seen in the antrum & pylorus similar to that noted by Petic M et al [13]. The most common lesion of the duodenum was found to be adenocarcinoma which was found to be common in the periampullary region, in contrast to Ryder et al where the most common site was 2nd part of duodenum followed by periampullary region [14].

CONCLUSION:

The non-neoplastic lesion comprises gastritis, granulomatous lesion, dysplasia and polyp while the most common neoplastic lesions were squamous cell carcinoma, adenocarcinoma, adenosquamous carcinoma and non-Hodgkin's lymphoma.

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