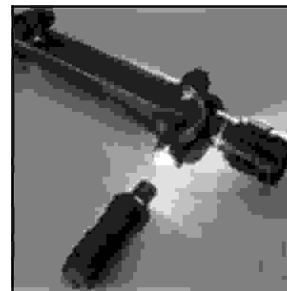


ORIGINAL

PROF-1019

DIAGNOSTIC ROLE OF ENDOSCOPY; AN EXPERIENCE AT FAISALABAD



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ABSTRACT ... drmasood60@hotmail.com **Objectives:** To see the usefulness of Endoscopy in patients with various gastrointestinal manifestations. **Design:** Prospective study. **Setting:** Department of medicine and gastroenterology Allied Hospital Faisalabad **Period:** January 2005 to July 2005, **Material & Methods:** This study was conducted on 500 patients presented to us with various gastrointestinal manifestations of either sex and between 13-70 years. **Results:** 260 patients were Males and 237 were Females. Most common indication was epigastric pain. 60.4% of the patients had organic lesion. Endoscopy was maximally positive in inpatients (91.86%). Most common lesion was in stomach i.e. gastritis. Collectively ulcerative lesions came out to be 27.30%. **Conclusion:** Diagnostic yield of Endoscopy is undoubtedly very high if the patient selection is done in a meticulous way.

Key words: High diagnostic yield, upper G.I Endoscopy

INTRODUCTION

Advances in fiber optic endoscopy have greatly aided gastroenterologists in the diagnosis and treatment of digestive disorders and some new therapeutic endoscopic techniques have now become an integral part of standard practice¹.

High priority indications for endoscopy of upper G.I tract in which procedure is almost always appropriate and there is high yield of useful diagnostic information are

acute upper G.I bleeding, Dysphagia, severe heart burn not responding to medical treatment, Gastric Ulcer and Unexplained radio graphic findings. Indications with less priority are unexplained abdominal pain and obscure chest pain. Many of these patients have functional symptoms but endoscopic findings may have a role in determining patient management. Also identifiable disease may be ruled out or severe mucosal disease may be identified^{2,3}.

Endoscopic examination is customary in the management of patients of gastric ulcer disease and endoscopic examination of duodenal bulb has revolutionized the diagnosis of Duodenal Ulcer⁴. Endoscopic evaluation of Gastric Ulcer from an expert endoscopist is comparable to the prognostic value of severe Dysplasia⁵. The instrumentation involved in the performance of G.I endoscopy has become increasingly miniaturized, effective and safe allowing the endoscopist to perform majority of routine endoscopic procedures in the Out Patient Department or even in Office setting⁶.

Peptic Ulcer disease accounts for 50% of Hospital admissions due to acute upper G.I bleeding^{7,8}, where as Gastric Erosions accounts for 10% to 20% of cases^{9,10}. Bleeding Oesophageal Varices is another leading cause of upper G.I bleeding^{11,12}. Drugs especially Asprine / Nsaids, high doses of steroids, Alcoholism and Anticoagulants are common causes of Gastric Erosions^{13,14}.

Upper GI Endoscopy offers direct picture of Oesophagus, stomach and duodenum enabling us to observe the details and it is the reliable tool for correctly determining etiology of upper GI bleed. Upper GI bleeding is common medical problem resulting in high morbidity, mortality, frequency of hospitalization and cost of treatment¹⁵ and upper GI endoscopy is the diagnostic modality of choice in such cases¹⁶. An early endoscopy has considerably altered the older concept of the causes of bleeding and subsequent therapeutic options as Sclerotherapy, Band ligation thermo and photo coagulation etc.

OBJECTIVE

Objective of this study was to see the usefulness (Diagnostic Role) of endoscopy in patients presenting with various gastrointestinal manifestations.

MATERIAL & METHODS

This prospective study was conducted at the Endoscopy Unit, Department of Medicine and Gastroenterology Allied Hospital, Faisalabad. From January 2005 to July 2005. A total number of 500 patients were endoscoped for various indications.

Majority of the patients were selected on out door basis while rest of the patients were referred from various Medical and Surgical Units of Allied Hospital, Faisalabad. The indication of endoscopy in these patients was decided by the referring doctor.

All patients were endoscoped with flexible Fiberoptic Olympus GIF Q10 endoscope, after xylocain throat spray and sedation with diazepam was used only in selective patients.

Inclusion Criteria

All patients referred to endoscopy unit with history of upper GI symptoms and having no absolute contraindication.

Exclusion Criteria

- * Age less than 12years
- * Uncooperative/unfit patients for OGD
- * Patients having concomitant diseases like recent MI, severe asthma, disturbed sensorium.

RESULTS

A total no. of 500 patients with upper GI symptoms were included in this study over a period of six months. 260 were males (52.6%) and 237 females (47.4%) table-I and mean age group was 35 years, Figure-I. 414 patients were selected on outdoor basis while only 86 patients were taken from various medical and surgical units of Allied Hospital, Faisalabad, table-II.

Table-I Distribution of Sex

Sex	No of Patients	% age
Male	263	52.60%
Female	237	47.40%

Table-II.

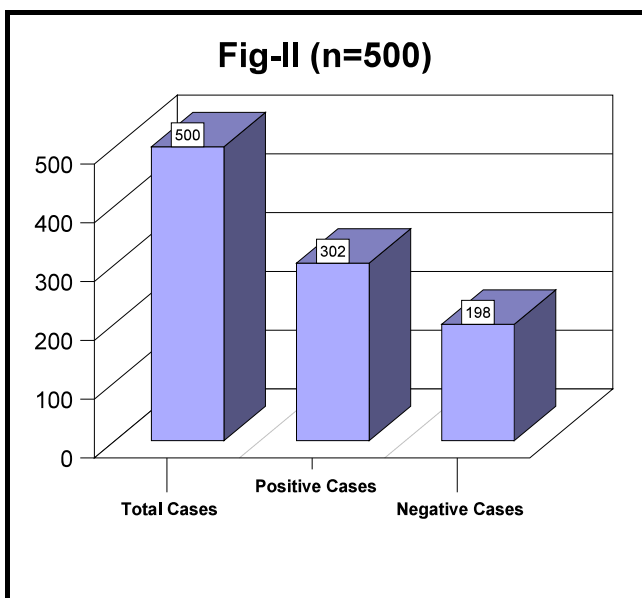
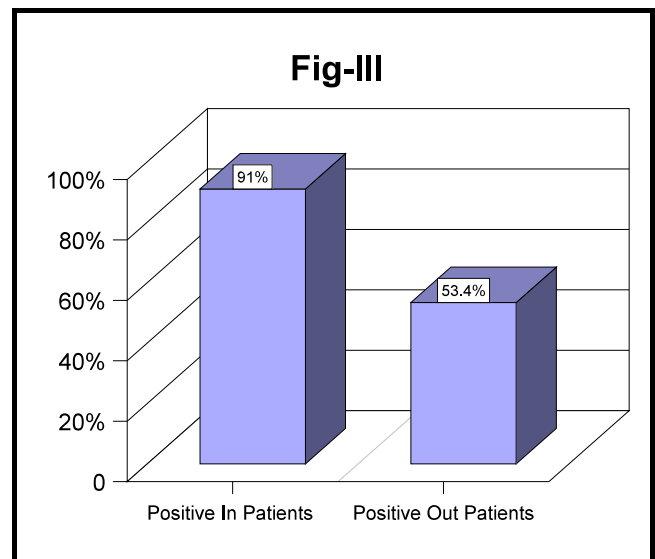
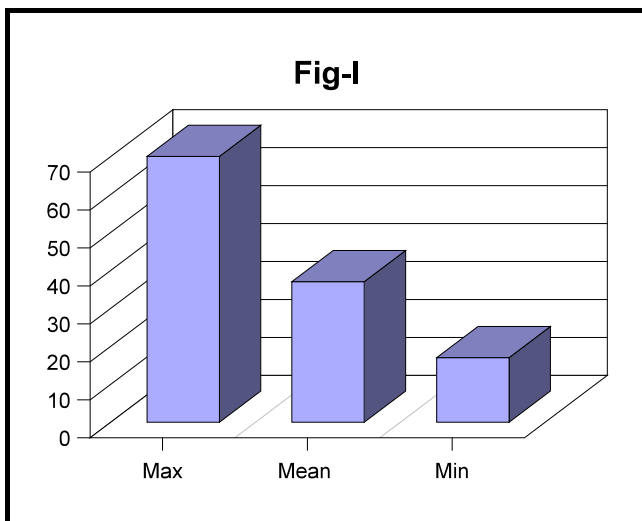
	No of Patients	% age
Out patients	414	82.8%
In patients	86	17.2%

Indications	No of Patients	% age
Epigastric pain	354	70.80%
Dyspeptic symptoms	60	12%
Hematemesis/Melena	54	10.80%
Dysphagia	22	4.40%
Loose Motions	10	2%

Most common indication for endoscopy was Epigastric pain (71%) followed by dyspeptic symptoms (12%) and Hematemesis and Melena (11%), table-III.

Out of the patients subjected to endoscopy 60.4% cases turned out to be positive i.e they had organic lesion while 39.6% shown no endoscopically demonstrable organic lesion, Figure-II.

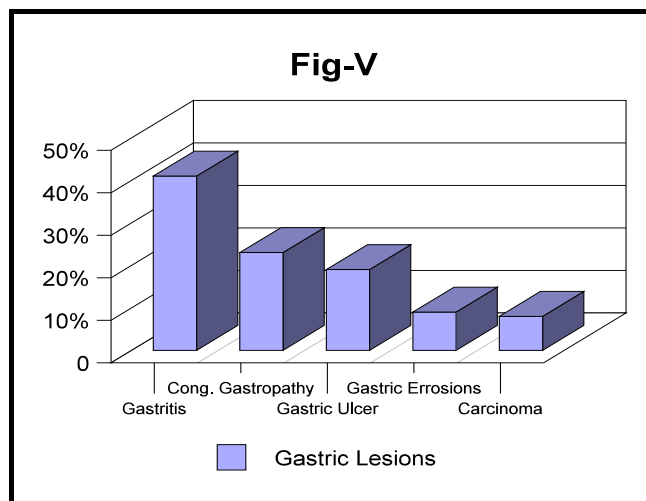
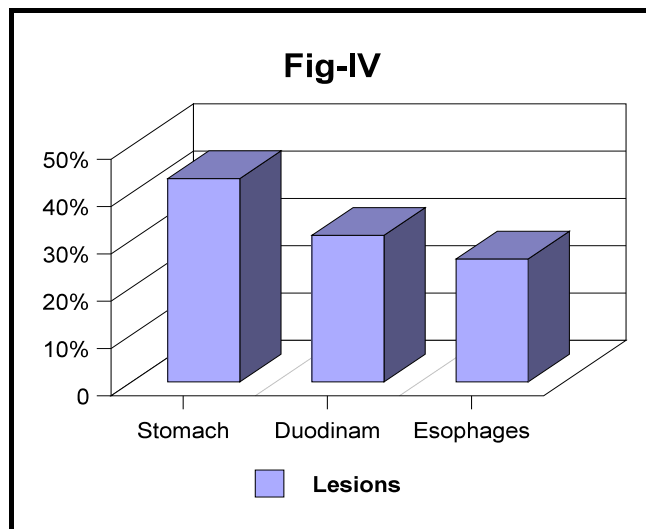
Endoscopy was maximally positive in inpatients (91.86%) a reflection of better selection criteria while in patients selected on outdoor bases its diagnostic yield was only 53%, a loose selection criteria, Figure-III.



Most common organic lesion was found in stomach (43%) followed by duodenum (31%) and Oesophagus (26%), Figure-IV. Among the stomach lesions most common abnormality was Gastritis 41%, followed by Congestive gastropathy 23%, Gastric Ulcer 19%, Gastric Erosions 9.30% and Carcinoma 7.70%, Figure-V. Collectively ulcerative lesions comes out to be 27.30%. The ratio of Gastric Ulcer and Erosion is quite comparable to a study done by Farooque JL et al⁸.

Figure-VI. shows distributions of duodenal lesions, duodenal Ulcer accounting for 30% and duodinitis for 50% of cases.

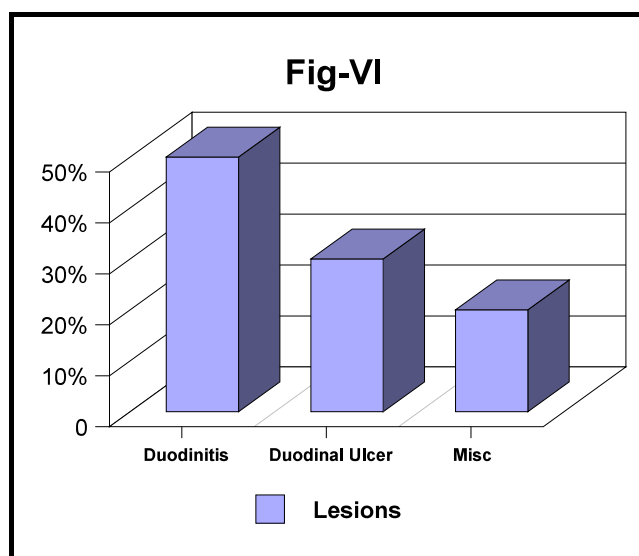
In esophageal lesions esophageal varices were on the top i.e 50% followed by esophageal Ulcer 20%, esophagitis 18% and Hiatus Hernia 12%, Figure-VII.



DISCUSSION

Endoscopy is a very useful diagnostic procedure so easy and comfortable for the patient that no physician should have reservations about its use. On the other hand over utilization of endoscopy can occur in any setting. Rand study proclaims that one of six upper GI endoscopies is inappropriate¹⁷. In our study the percentage of negative endoscopies in out door patient also suggests the same. In our study diagnostic yield was quite high in the indoor selected patient (92%) in contrast to the outdoor selected

cases 53%. The difference of the positive yield of endoscopy is explained on the basis of more defined and compelling indications for endoscopy in Hospital admitted patient. This high yield of endoscopy in carefully selected patients speaks itself of the high diagnostic and therapeutic role of endoscopy in the patient management.

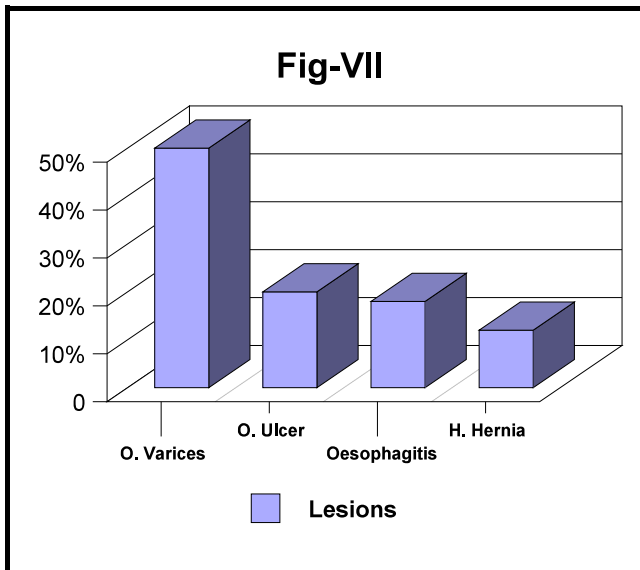


In this series the most common indication for endoscopy was Epigastric pain (70.8%) which is comparable to a study performed at the Lahey Clinic endoscopy unit. The Ulcerative lesions responsible for pain were discovered in only 17% of these cases. This was infact due to loose criteria for selection of patients because of the fact that most of the patient were selected from out patient department.

In 11 % of cases evaluated for upper GI bleed (Hematemesis & Melena) the diagnostic yield was highest which is matching with the high diagnostic yield of endoscopy (84%) for acute upper GI bleeding in Lehey Clinic endoscopy unit¹.

Gastric Ulcerative Lesions in our study accounts for 27.30% of cases (Gastric Ulcer 19%, Gastric Erosions 9.30%) this ratio of Gastric Ulcer and Erosions is quite comparable to a study done by Farooque JL et al⁸ regarding endoscopic lesions in upper GI bleed but contrary to that study the number of patients with gastritis

is quite high (41%) due to excess of OPD patients in our study.



On the other hand the dominance of non specific mucosal disease i.e Gastritis (41%) and duodinitis (50%), over mucosal ulceration (Gastric Ulcer 19% and Duodenal Ulcer 30%) which prevails in our study is comparable to the results of endoscopy done in 52 of 200 consecutive patients at the Lehey Clinic endoscopic unit¹.

26% of the patients had organic lesions in esophagus and 50% of these lesions was esophageal varices which indicates the high prevalence of upper GI bleed from esophageal varices due to decompensated liver cirrhosis, an ever growing thread in our community. Endoscopy has proved to be an important tool in the evaluation of the cause of upper GI bleed and also its management in such patients.

In 22 patients evaluated for Dysphagia although 14 patients had organic lesion (carcinoma and stricture esophagus), no anatomical lesion was found in the remaining 8 of these patients but to our surprise Dysphagia of these patients was relieved after the procedure. Does it reflect the placebo effect? These patients never turned up for follow up but we feel this should be further evaluated.

CONCLUSION

We feel that the diagnostic yield of the endoscopy is undoubtedly very high if the patient selection is done in a meticulous way. In the long run, not only it is quite time saving both for the patient and the attending physician but it is also quite economical because it salvages the use of other nonspecific investigations. Moreover both the attending doctor and the consulting physician are quite at ease that diagnosis is certain and patient can be reassured quite confidently and unnecessary use of Drugs is avoided.

But the key factor in all is the expertise of the endoscopist. Today the facility of endoscopy is quite freely available in our country and it is recommended that this facility should be used without any reservation in all the indicated cases for better diagnosis and therapeutic outcome.

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ULTRASOUND SCAN




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