Original Research Article

A study various endoscopic findings of patients undergoing upper GI endoscopy at tertiary health care centre

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Abstract

Background: Gastrointestinal diseases are an important healthcare problem worldwide, especially in pediatric age group **Aims and Objectives:** to Study various Endoscopic findings of patients undergoing upper GI endoscopy at tertiary health care centre. **Methodology :** This was a cross-sectional study carried at tertiary health care centre referred for Upper GI Endoscopy during one year period from January 2017 to January 2018 , in the one year period there were 126 patients referred for the procedure after written and explained consent were undergone Upper GI endoscopy with all aseptic precautions and standard protocols , all the details of the patients like age, sex, provisional diagnosis endoscopic findings etc. were entered to excel sheets and analyzed by Excel software for windows 10 . **Result:** In our study we have seen that The average age of the patients was 11.56 ±6.47 Yrs. and range was 1-55 Yrs. (Min –Max). The majority of the patients were Female i.e. 51.59% and Males were 48.41%.The most common provisional diagnosis were Hematemesis under investigation - 22.22%, followed by Mass per abdomen - in 15.87%, Foreign body in 13.49%, Vomiting under investigation in 11.11%, Fever under investigation in 10.32%, Ascitis under investigation in 8.73%, Cirrhosis with portal Hypertension in 5.56%, Upper GI obstruction in 4.76%, Dysphagia under investigation in 4.76%, Malena under investigation in 3.17%. The most Endosopic common findings were Esophageal varices Grade I in 15.08%, followed by Esophageal varices Grade III in 13.49%, Esophageal Varices Grade IV in 11.90%, Esophageal Varices Grade II In 11.11%, Esophageal strictures + Grdae I Varices+ Erosive Gastritis in 10.32%, Gastric erosion +Foreign body in 7.14%, Stage III GERD in 5.56%, Reflux esophagitis in 3.17%, Gastric mucosal thickening , Gastric outlet obstruction, Multiple erosions in fundus in 2.38%, Large anterior duodenal ulcer , Multiple erosions in fundus with mosiac pattern , Hiatus hernia with prolapsing gastropathy, Prolapsing Gastropathy , Post colectomy , Post GJ Status ,Sliding hernia , Sliding hiatus hernia – in 1.59%, Achalgia cardia + Gastro Esophageal strictures and Antral Gastrtis - 0.79%. **Conclusion:** It can be concluded from our study that the most common endoscopic findings were Esophageal varices, Esophageal strictures, Erosive Gastritis, Reflux esophagitis Gastric mucosal thickening, Gastric outlet obstruction, Gastric erosion +Foreign body etc.

Key Word: Upper GI endoscopy, GERD, Reflux esophagitis.

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INTRODUCTION

Gastrointestinal diseases are an important healthcare problem worldwide, especially in pediatric age group[1]. Bozzini is considered to be the pioneer of modern gastroenterology, who used candle-powered lichtleiter for the first time in medical history in 1805[2]. After the introduction of flexible endoscopy by Hirschowitz in 1950's, use of upper GI endoscopy also started in pediatrics[3]. This led to inception of field of pediatric gastroenterology in 1960's in developed countrie[4]. Later

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on, fiberoptic endoscopies for children were developed mainly in 1970's and upper GI endoscopy became a standard of care in diagnosis of many gastrointestinal problems in children[5],[6],[7]. Since then, pediatric gastroenterology is growing rapidly and has emerged as one the most diverse medical-surgical sub-specialty in modern medicine in the developed world[8]. Despite the high diagnostic yield, upper GI endoscopy is still an under-utilized tool and information regarding its efficacy is scanty in most of the developing countries[9]. This is mainly due to lack of awareness about the role of this important diagnostic modality in children which prevents referrals of these children to a center where this facility is available. On the other hand, factors like lack of trained pediatric gastroenterologists or lack of well-equipped pediatric endoscopic suites in resource-limited countries may also play an important role. Furthermore, there is lack of data from nonwestern countries regarding the appropriate indications of endoscopy in children or while referring a child for endoscopy[8] So we have done this study various Endoscopic findings of patients undergoing upper GI endoscopy at tertiary health care centre

METHODOLOGY

This was a cross-sectional study carried at tertiary health care centre referred for Upper GI Endoscopy during one year period from January 2017 to January 2018 , in the one year period there were 126 patients referred for the procedure after written and explained consent were undergone Upper GI endoscopy with all aseptic precautions and standard protocols , all the details of the patients like age, sex, provisional diagnosis endoscopic findings etc. were entered to excel sheets and analyzed by Excel software for windows 10.

RESULT

Table 1: Distribution of the patients as per the age

Age	Mean ± SD
Average age (Yrs.)	11.56 ±6.47
Range (Yrs.)	1-55

The average age of the patients was 11.56 ±6.47 Yrs. and range was 1-55 Yrs. (Min –Max)

Table 2: Distribution of the patients as per the sex

Sex	No.	Percentage (%)
Male	61	48.41
Female	65	51.59
Total	126	100.00

The majority of the patients were Female i.e. 51.59% and Males were 48.41%.

Table 3: Distribution of the patients as per the Provisional diagnosis

Provisional diagnosis	No.	Percentage (%)
Hematemesis under investigation	28	22.22
Mass per abdomen	20	15.87
Foreign body	17	13.49
Vomiting under investigation	14	11.11
Fever under investigation	13	10.32
Ascitis under investigation	11	8.73
Cirrhosis with portal Hypertension	7	5.56
Upper GI obstruction	6	4.76
Dysphagia under investigation	6	4.76
Malena under investigation	4	3.17
Total	126	100.00

The most common provisional diagnosis were Hematemesis under investigation - 22.22%, followed by Mass per abdomen - in 15.87%, Foreign body in 13.49%, Vomiting under investigation in 11.11%, Fever under investigation in 10.32%, Ascitis under investigation in 8.73%, Cirrhosis with portal Hypertension in 5.56%, Upper GI obstruction in 4.76%, Dysphagia under investigation in 4.76%, Malena under investigation in 3.17%.

Table 4: Distribution of the patients as per the Endoscopic Findings

Endoscopic findings	No.	Percentage (%)
Esophageal varices Grade I	19	15.08
Esophageal varices Grade III	17	13.49
Esophageal Varices IV	15	11.90
Esophageal Varices Grade II	14	11.11
Esophageal strictures + Grdae I Varices+ Erosive Gastritis	13	10.32
Gastric erosion + Foreign body	9	7.14
Stage III GERD	7	5.56
Reflux esophagitis	4	3.17
Gastric mucosal thickening	3	2.38
Gastric outlet obstruction	3	2.38
Multiple erosions in fundus	3	2.38
Multiple erosions in fundus with mosiac pattern	3	2.38
Hiatus hernia with prolapsing gastropathy	2	1.59
Large anterior duodenal ulcer	2	1.59
Post colectomy	2	1.59
Post GJ Status	2	1.59
Prolapsing Gastropathy	2	1.59
Sliding hernia	2	1.59
Sliding hiatus hernia	2	1.59
Achalgia cardia + Gastro Esophageal strictures	1	0.79
Antral Gastrtis	1	0.79
Total	126	100.00

The most Endosopic common findings were Esophageal varices Grade I in 15.08%, followed by Esophageal varices Grade III in 13.49%, Esophageal Varices Grade IV in 11.90%, Esophageal Varices Grade II In 11.11%, Esophageal strictures + Grdae I Varices+ Erosive Gastritis in 10.32%, Gastric erosion +Foreign body in 7.14%, Stage III GERD in 5.56%, Reflux esophagitis in 3.17%, Gastric mucosal thickening , Gastric outlet obstruction, Multiple erosions in fundus in 2.38%, Large anterior duodenal ulcer , Multiple erosions in fundus with mosiac pattern , Hiatus hernia with prolapsing gastropathy, Prolapsing Gastropathy , Post colectomy , Post GJ Status ,Sliding hernia , Sliding hiatus hernia – in 1.59%, Achalgia cardia + Gastro Esophageal strictures and Antral Gastrtis - 0.79%.

DISCUSSION

Upper GI endoscopy is one of the most specific, quick and costeffective diagnostic tool for a wide variety of gastrointestinal disorders in children, especially under the circumstances when other investigations are not conclusive. In addition to its diagnostic use, upper GI endoscopy also has an established therapeutic role and various disorders like upper GI bleeding, Mallory Weiss tear; gastric erosions can be effectively treated by endoscopy [9,10,11]Therefore, despite changing indications over a period of time, the disorders requiring upper GI endoscopy for diagnostic or therapeutic purposes in children have shown a rising trend [12]. In our study we have seen that The average age of the patients was 11.56 ±6.47 Yrs. and range was 1-55 Yrs. (Min –Max) The majority of the patients were Female i.e. 51.59% and Males were 48.41%. The most common provisional diagnosis were Hematemesis under investigation - 22.22%, followed by Mass per abdomen - in 15.87%, Foreign body in 13.49%, Vomiting under investigation in 11.11%, Fever under investigation in 10.32%, Ascitis under investigation in 8.73%, Cirrhosis with portal Hypertension in 5.56%, Upper GI obstruction in 4.76%, Dysphagia under investigation in 4.76%, Malena under investigation in 3.17%.The most Endosopic common findings were Esophageal varices Grade I in 15.08%, followed by Esophageal varices Grade III in 13.49%, Esophageal Varices Grade IV in 11.90%, Esophageal Varices Grade II In 11.11%, Esophageal strictures + Grdae I Varices+ Erosive Gastritis in 10.32%, Gastric erosion +Foreign body in 7.14%, Stage III GERD in 5.56%, Reflux esophagitis in 3.17%, Gastric mucosal thickening , Gastric outlet obstruction, Multiple erosions in fundus in 2.38%, Large anterior duodenal ulcer, Multiple erosions in fundus with mosiac pattern , Hiatus hernia with prolapsing gastropathy, Prolapsing Gastropathy, Post colectomy , Post GJ Status ,Sliding hernia , Sliding hiatus hernia – in 1.59%, Achalgia cardia + Gastro Esophageal strictures and Antral Gastrtis -0.79%. These findings are similar to these studies they found the most common findings at the upper gastrointestinal endoscopy (UGIE) were gastritis and duodenal ulcer which is similar to the report from other studies where epigastric or upper abdominal pain were the major indications for UGIE.[13,14,15]

CONCLUSION

It can be concluded from our study that the most common endoscopic findings were Esophageal varices, Esophageal strictures, Erosive Gastritis, Reflux esophagitis Gastric mucosal thickening, Gastric outlet obstruction, Gastric erosion +Foreign body etc.

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