Original Research Paper

Volume : 5 | Issue : 9 | September 2016 • ISSN No 2277 - 8179 | IF : 3.508 | IC Value : 69.48

Hiatus Hernia: is Upper Gastrointestinal Endoscopy is Helpful?

Medical Science

KEYWORDS : Hiatus hernia, endoscopy, Nissen fundoplication

Dr Samir Ray — Associate Professor, Surgery, GMERS Medical College, Gujarat

Dr Jaydeep Gadhavi — Assistant Professor of Surgery, GMERS Medical College, Gandhinagar

*** Dr Hiren Parmar** — Associate Professor of Surgery, GMERS Medical College, Gandhinagar.
* Corresponding Author

ABSTRACT

Approximately 25 million people of us have heartburn every day. About half of the all people above 40 have a hiatal hernia of some degree. In many patients, hiatal hernia is diagnosed accidently and it is asymptomatic and requires no treatment. Upper gastro endoscopy has main role in the investigation and treatment. This study is an attempt to provide information of comparative benefit of endoscopy in treatment of hiatus hernia over any other mode of investigation and or treatment. This is a prospective study of both outdoor and indoor patients at our institute. Patients were evaluated by clinical history and examination. Patients with symptoms suggestive of acid peptic disorder, epigastric pain and or persistent vomiting were posted for gastroscopy. To determine the role of endoscopy in investigation and as well as in further evaluation in diagnosed hiatus hernia. To evaluate therapeutic role of endoscopy. To compare safety, success rate and economy to any other type of investigation. To know the status of treated patients. The mean age for hiatus hernia is 40-70 years. Hiatus hernia was present in about 10.77% of patients. More than half no of patients had normal findings. There was not a single complication of gastroscopy in this series. 17 patients were diagnosed as hiatus hernia and treated conservatively. The follow up examinations were done on 2, 4 and 6 months. 12 out of 17 patients came for regular follow up. 5 patients did not come for regular follow up after 4 months. Surgical intervention was advised to 6 patients but 5 patients were satisfied with the conservative treatment. One patient was treated by laparoscopic Nissen fundoplication. Epigastric pain and chest pain were almost common complain. After diagnosing a hiatus hernia endoscopically, all patients had undergone barium meal follow up in which 16 patients had a positive report. It suggests the accuracy of endoscopy. Endoscopy is also useful in therapeutic intervention in complications of hiatus hernia like ulcer, stricture etc. The complications of endoscopy are perforation, aspiration, medication reaction and haemorrhage. Endoscopy is useful in the assessment of treated patients of hiatus hernia. Endoscopy is useful in diagnosis, staging of hiatus hernia and in assessment of symptoms after treatment of the hiatus hernia.

Introduction

Approximately 25 million people of us have heartburn everyday. [1] About half of the all people above 40 have a hiatal hernia of some degree.[2] In many patients, hiatal hernia is diagnosed accidently and it is asymptomatic and require no treatment. Upper gastro endoscopy has main role in the investigation and treatment.[3] In all type of hiatal hernia except paraesophageal type,conservative treatment is choice.[4] It includes changes in lifestyle, use of motility increasing drugs and proton pump inhibitors.[5] Non responders to conservative treatment are consider for surgical treatment.[6] In 1955, Nissen has first performed fundoplication for hiatus hernia through upper abdominal incision.[7] To reduce hospital stay and faters recovery Barnard Dallamagne had first performed laparoscopic Nissen fundoplication in 1991.[8] This study is an attempt to provide information of comparative benefit of endoscopy in treatment of hiatus hernia over any other mode of investigation and or treatment.

Material and methods

This is a prospective study of both outdoor and indoor patients at our institute. Patients were evaluated by clinical history and examination. Patients with symptoms suggestive of acid peptic disorder, epigastric pain and or persistent vomiting were posted for gastroscopy. AIMS : (1)To determine the role of endoscopy in investigation and as well as in further evaluation in diagnosed hiatus hernia. (2)To evaluate therapeutic role of endoscopy (3)To compare safety, success rate and economy to any other type of investigation (4)To know the status of treated patients. The procedure of gastroscopy[9]: patient was kept nil by mouth for 6 hours prior to the procedure. The procedure was carried out under local anaesthesia with use of 4% lignocaine viscous orally. The position of the patient was left lateral with continuous monitoring with pulse oximetry. The examination of the upper gastrointestinal tract up to 2nd part of duodenum was done. After completion of procedure, patient was kept in the recovery room for 2 hours and watch for nausea, vomiting, abdominal pain and upper GI bleeding. Patient was discharged and treatment was given according to the findings of gastroscopy afterward. Patients with positive findings of hiatus hernia were called for follow up gastroscopy at 2, 4 and 6 months afterward.

Results

The following observations were made from the study of 17 patients with positive findings of hiatus hernia and treated at our institute. The mean age for hiatus hernia is 40-70 years. Most common symptoms are abdominal pain, nausea, vomiting and regurgitation. Hiatus hernia was present in about 10.77% of patients. More than half no of patients had normal findings. There was not a single complication of gastroscopy in this series; however it was too small for study of complications. A difficulty was found in the introduction of gastroscope in one patient where after assurance patient allow the procedure. 17 patients were diagnosed as hiatus hernia and treated conservatively. The follow up examinations were done on 2, 4 and 6 months. 12 out of 17 patients came for regular follow up. 5 patients did not come for regular follow up after 4 months. Surgical intervention was advised to 6 patients but 5 patients were satisfied with the conservative treatment. One patient was treated by laparoscopic Nissen fundoplication. Patient came for regular follow up for 6 months. He got total symptomatic relief.

Table 1 Age distribution

Age (in years)	No of patients
31-40	4
41-50	5
51-60	5
61-70	3

Table 2 Clinical Presentation

Symptom	No of patients
Abdominal pain	9
Post prandial fullness	2

Nausea and vomiting	9
Dysphagia	5
Heart burn	2
Palpable lump	1
Regurgitation	8

Table 3 Gastroscopy Findings

Findings	No of patients
Hiatus hernia	17
Esophagitis	25
Duodenitis	14
Gastritis	38
Gastric ulcer	02
Duodenal ulcer	02
Oesophageal varices	-
Oesophageal stricture	02
Normal	111
Total	167

Discussion

This is a prospective study of 167 patients in which 17 patients were diagnosed as a hiatus hernia by endoscopy. Epigastric pain and chest pain were almost common complain.[10] Pain aggravates after taking meal and in supine position.[11] Nausea was also a prominent symptom which generally occurs after meal. After diagnosing a hiatus hernia endoscopically, all patients had undergone barium meal follow up[12] in which 16 patients had a positive report. It suggest the accuracy of endoscopy.[13] Other investigations for confirmation of hiatus hernia are 24 hours pH monitoring and oesophageal manometry.[14] In Bhargava et al[15], results are different than present study. Because patients with symptoms suggestive of acid peptic disorder and hiatus hernia were only taken in this study. It may be due to patient's personal habits and surrounding environment. Patients have hiatus hernia also have other associated diseases like stricture esophagitis, esophagitis, gastritis etc. Endoscopy is also useful in therapeutic intervention in complications of hiatus hernia like ulcer, stricture etc.[16] The complications of endoscopy are perforation, aspiration, medication reaction and haemorrhage.[17] As per survey of British Society of Digestive endoscopy in 1972[18], they found 77 complications in 24000 endoscopic examinations. There was not a single complication in this study however this study is too small for the study of complications. The treatment of hiatus hernia is conservative and surgical. 16 patients were treated with conservative treatment successfully. Only one patient needed surgical intervention. Now a day, laparoscopic Nissan fundoplication is the treatment of choice. Laparoscopic repair has less morbidity and mortality rates and more patient acceptability.[19] Endoscopy is useful in the assessment of treated patients of hiatus hernia.

Conclusion

Endoscopy is useful in diagnosis, staging of hiatus hernia and in assessment of symptoms after treatment of the hiatus hernia.[20]

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