Hiatal Hernia in Achalasia

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Abstract

Barium esophagograms of 89 patients out of 110 with manometrically proven achalasla were reviewed. Only four (4.4%) patients showed association of hiatal hernia, Indicative of Its rare occurrence. Presence of hiatal hernia, is said to have less likelihood of associated achalasia but this association does exist as per our report and that of others (JPMA 48:196,1998).

Introduction

Achalasia is a well recognized primazy motor disorder of the esophagus, characterized by aperistalsis of the esophageal body and incomplete relaxation of the lower esophageal sphincter (LES) in response to swallowing. Barium esophagogram typically shows a dilated esophageal body with smooth tapering of the gastroesophageal junction, resulting in a “bird beak” appearance with an air barium level. Although hiatal hernia is a frequent radiological finding in the general population (20-50%)[1,2], several reports have emphasized its rarity in achalasia[3-6]. It has been suggested that the alternative diagnosis of hiatal hernia with distal 3rd peptic stncture, resulting in secondary esophageal dilatation should be excluded before labeling a patient with achalasia and associated hiatal hernia[7]. Prompted by these considerations, we studied the prevalence of hiatal hernia in achalasia after reviewing the barium swallow radiographs.

Patients and Methods

Records of 110 consecutive patients with achalasia seen at the Shaikh Zayed Hospital from 1989 to 1995 were reviewed. The records were analyzed for age, sex, history of esophageal surgery (myotomy), barium swallow and esophageal manometery. Diagnosis of achalasia was made by history suggesth’e of achalasia i.e. dysphagia to liquids and solids, barium examination of the esophagus showing dilated esophageal body with distal tapering of the gastroesophageal junction and of abnormal motility on fluoroscopy. Upper 0.1. endoscopy records were reviewed to exclude any malignant lesions as well as confirmation of findings on barium swallow. On manometry . evaluation for aperistalsis in the esophageal body, absence of or incomplete LES relaxation and intraesophagcal pressure measurement, relative to the gastric baseline pressure was reviewed. Diagnosis of hiatal hernia was based on the presence of atleast 2cm ofthe gastric mucosa above the level of diaphragm. Endoscopic reports were also evaluated to look for the association of hiatal hernia with achalasia. Endoscopic criteria were tight lower gastrocsophageal (GE)junction giving into gentle endoscopic pressure. Hiatal hernia was documented by measuring distance from the G.E. junction to the diaphragmatic contraction level. Twenty one out of 110 patients were excluded from the analysis due to incomplete information on Barium swallow X-rays, the results were thus, based on analysis of 89 patients.

Results

Of 89 patients with achalasia. 4(4.4%) had hiatal hernia. Three of these were female, one male, with

mean age of 44.5±12.1 years (range 40-65 years), all four patients had dysphagia, regurgitation, one had chest pain and another had retrosternal burning as additional symptoms. None had prior history of esophageal surgery. All were treated with pneumatic balloon dilatation. There was no unusual difficulty encountered in performing the balloon dilatation.

Discussion

Achalasia is one of primary esophageal motility disorders characterized, clinically by intermittent dysphagia, both for solids and liquids, often associaLed with regurgitation. The frequency of hiatal hernia ni general population is estimated to be approximately 5 per 1000 population. Its prevalence in the Western world is reported as 50 to 100 times greater than seen in Asia or Africa[8]. There is no gender predominance and about 60% of elderly in the United States have hiatal hernia on radiographic studies[9]. Hiatal hernia is often readily identified on barium swallow with patient in the prone position while maintaining abdominal compression[10]. Several reports have emphasized the relative rarity of hiatal hernia in patients with achalasia[3-4], Palmer noted eight out of 64 (12.5%) patients having associated achalasia and hiatal hernia[7] favouring previous observations regarding the rare occurrence of hiatal hernia inachalasia. Diagnosis of achalasia in our patients was well documented by combination of radiological, endoscopic and manometric findings. Frequency of hiatal hernia in our patients with achalasia was 4.4%, comparable to the study by Meshkinpour et al[5], much lower than 12.5% reportedby Palmer[7]. Factors responsible for rarity of associated hiatal hernia in patients with achalasia are not known. It is possible that patients with achalasia do not show enough barium entry into the stomach, hiatal hernia may therefore, be missed on barium swallow, We observed two waists of balloon indentation in these patients, the proximal being that of LES and distal due to diaphragmatic hiatus. It was felt important to keep the proximal waist in the center of the balloon for appropriate dilatation. All patients with this association responded well to pneumatic balloon dilatation, suggesting that such treatment can be rendered successfully without additional riks of complications.

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