TRANSCUTANEOUS SONOGRAPHIC DIAGNOSIS OF ACHALASIA CARDIA

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Introduction

Despite its enormous practical value very few data exists on evaluation of gastrooesophageal junction by transcutaneous sonography (also known as per abdominal sonography). We here want to emphasize the significant importance of evaluation of gastrooesophageal junction in routine transcutaneous upper abdominal sonography, whereby important findings relating to oesophageal varices and oesophageal carcinoma involving gastrooesophageal junction, hiatus hernia and achalasia cardia can be picked up. We present a case report of a 72 year old man suffering from dysphagia and weight loss who on routine transcutaneous sonographic examination of the upper abdomen was found to have achalasia cardia. We also elaborate the specific transcutaneous sonographic findings in achalasia cardia.

Case Report

A 72-year-old man presented with the complaint of difficulty in swallowing for last 6 years, which had been gradually aggravating.

Fig. 1 : Transcutaneous sonography of gastro oesophageal junction. Note dilated oesophagus (o) with tapering lower end, no wall thickening and empty stomach

This dysphagia of long duration had led to weight loss. He also complained of anorexia and recurrent vomiting. On examination he was looking frail and pale. His other vital parameters were normal. He was subjected for routine upper abdominal transcutaneous sonography. His liver, gall bladder and pancreas were normal. His spleen was mildly enlarged with normal echo pattern. He had small pericardial effusion. Evaluation of gastrooesophageal junction revealed dilated lower thoracic oesophagus holding some food particles with beak like narrowing of lumen just above gastrooesophageal junction. The oesophageal wall was smooth and not thickened (<5mm) and stomach was empty (Fig-1). On water ingestion, water was seen held up above this narrowing of the oesophagus and no water was passing into the stomach through this narrowed segment. A diagnosis of achalasia cardia was made on sonographic findings that was later confirmed on radiological barium studies (Fig-2).

Fig. 2 : Barium study confirming the diagnosis of achalasia cardia

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Discussion

Despite immense practical importance of transcutaneous sonography examination of upper abdomen not much data is available on evaluation of gastrooesophageal junction by this modality. After introduction of endoscopic sonography few reports on sonographic evaluation of gastrooesophageal junction have appeared in the literature. Janssen et al (1997) have for the first time reported a prospective study comparing findings of endoscopic sonography and transcutaneous sonography in evaluation of gastrooesophageal junction. They reported similar diagnostic accuracy by both modalities in picking up achalasia cardia, hiatus hernia and neoplasm involving gastrooesophageal junction. Endoscopic sonography however was found superior in picking oesophageal varices. The classical findings of dilated lower thoracic oesophagus with beak like tapering lumen near gastrooesophageal junction without any wall thickening (<5 mm) are diagnostic of achalasia cardia as seen in our case. After water ingestion, water hold up above

the narrowed segment with empty stomach almost confirms the diagnosis of achalasia cardia. A feature not reported in literature so far. This clearly emphasizes the need of evaluation of gastrooesophageal junction in all upper abdominal transcutaneous sonographic studies. We advocate that no upper abdominal sonography is complete without evaluation of gastrooesophageal junction especially in cases of dysphagia.

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