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Postural Relief of Food Impaction in a Patient with Stenosed Esophagus

— A Case Report —

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A patient with past history of esophageal stenosis complained of sudden dysphagia in the erect position which was relieved transiently in the supine position. Initial esophagoscopy failed to detect any mass in the lumen. Esophagogram revealed shifting foreign body from lower stenotic site to upper dilated area with postural change from the erect to the supine position. A French bean was detected and removed during the second esophagoscopy.

Key Words: *Esophagus, foreign bodies–Esophagus, obstruction–Esophagus, radiography–Esophagus, stenosis*

INTRODUCTION

It is usually easy to diagnose food impaction at the site of preexisting stenotic lesion because of sudden onset of symptom while eating and past history. We report a patient who presented with esophageal food impaction which was relieved transiently after postural change.

CASE REPORT

A 62-year-old man was admitted to the hospital because of sudden dysphagia for 5 days. Sixteen months befoe admission he swallowed 80cc of 99% glacial acetic acid. Six months before admission the esophageal stricture was treated by bougienage with some improvement. Five days ago he experienced sudden onset of dysphasia while eating rice-cake containg French beans.

On admission esophagoscopy revealed fibrotic ring formation at 36cm from upper incisor without definite intraluminal visible mass shadow. After the esophagoscopy he was able to take diet in the supine position but not in the erect position. Esophagogram was done 3 days after esophagoscopy for further evaluation of the unique esophageal obstruction phenomenon. Esophagogram in the erect position showed completed obstruction of the esophagus at the junction of interbronchial and retrocardiac segment. A filling defect with a sharp smooth upward convex meniscus appearance was noticed at the distal end of barium column (Figure 1). Another esophagogram obtained in the lateral decubitus position after 10 minutes in the supine position revealed passage of barium meal through the stenotic segment. Previously detected filling defect obstructing the narrowed site shifted to a higher position (Figure 2).

The barium coated ovoid ring-like increased density shifted downward and was relocated at the stenotic site in a subsequent erect roentgenogram. Immediately after esophagogram esophagoscopy was repeated and a French bean was removed.

DISCUSSION

Our patient presented with clinical findings of

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acute esophageal obstruction. The combination of past history of corrosive esophagitis and sudden onset of dysphagia while eating strongly suggested the possibility of esophageal food impaction at the stenotic site. The clinical assumption was not proved with esophagoscopy which showed no intraluminal mass. But as an esophageal foreign body may go undetected on initial endoscopic examination (Handi and Ong, 1978; Doddy, 1983; Gamba et al., 1983; Atkins et al., 1985), esophagogram was performed.

In the standing position the bean may be located in the most inferior stenotic site. Meal introduced in the erect position may push the impacted bean more inferiorly. But with changing position from

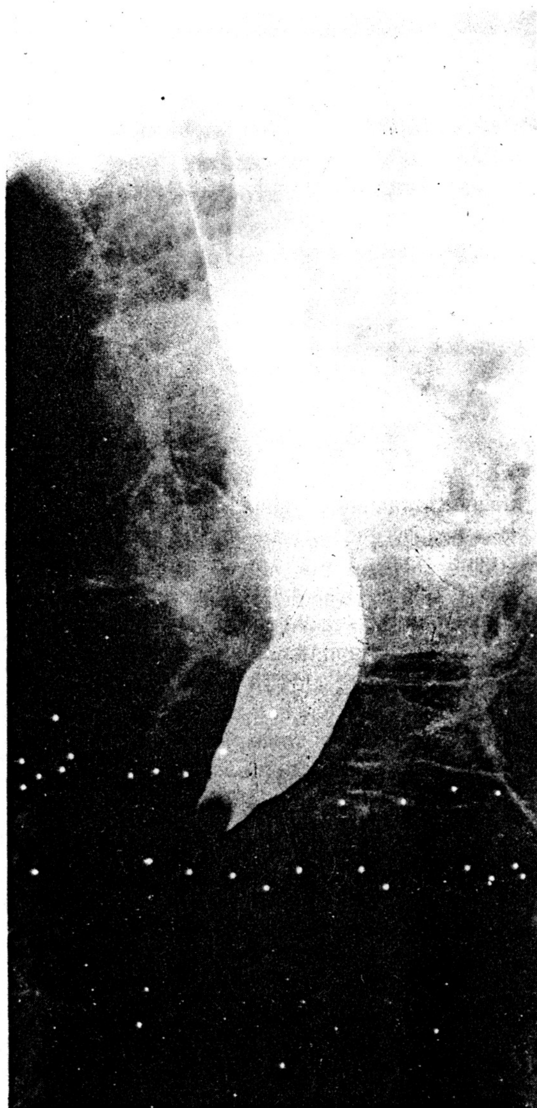

Fig. 1. Barium esophagogram obtained in the initial erect position shows a well defined filling defect completely obstructing the esophagus at the junction of interbronchial and retrocardiac segment. The distal end of barium column shows acute sharp meniscus appearance with upward convexity.

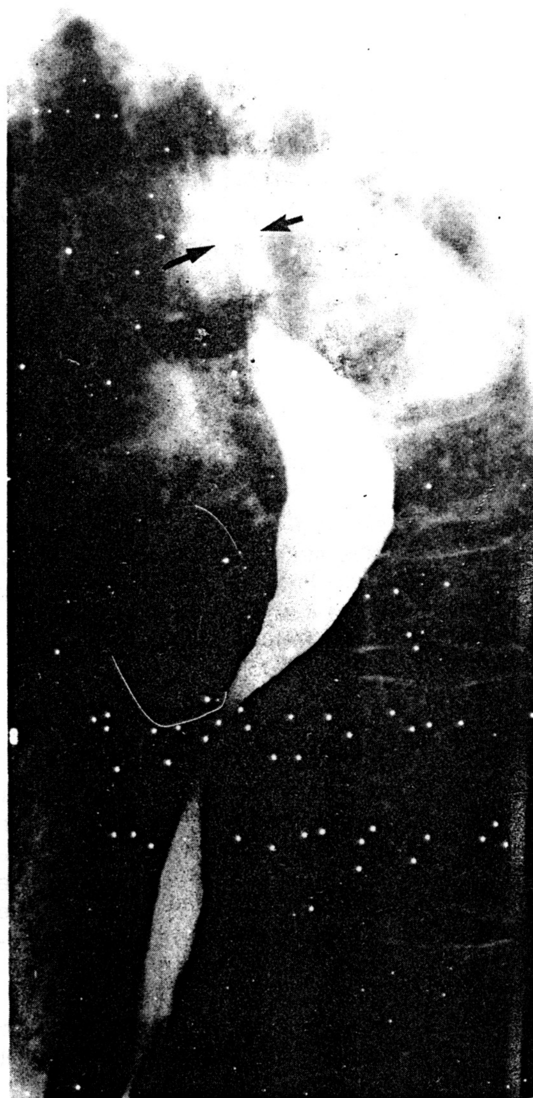

Fig. 2. Later barium esophagogram obtained in the right decubitus position about 10 minutes after supine position shows passage of barium meal through the stenotic site. The barium coated foreign body (arrow) has migrated upward during the interval time.

erect to supine state, the gravity force applied to the bean may be relieved. The bean may slowly migrate into a higher level. Then transient passage of food through the stenotic site may be possible.

In conclusion, this case shows the improtance of reexamination of endoscopic or radiologic study in the presence of strong clinical suspicion of a lesion and significance of postural relief of obstruction by the esophageal foreign body. Finally, this case has two lessons for endoscopists: i) carefully search for other lesions even if one is seen, ii) don't rush through the last part of the amination as one is pulling out of the esophagus.

REFERENCES

Atkins JP Jr, Keane MW, Rowe LD: *Foreign bodies in the esophagus: Esophageal perforation. In; Berk JE, Haubrich WS, Kalser MH, Rogh JLA, Schaffner F (eds) Bockus Gastroenterology, Vol 2 (4th ed), W.B. Saunders Co., Philadelphia, pp 777-786, 1985.*

Doddy WJ: *Esophagus and esophagogastric region. Radiology. In; Margulis AR, Burhenne HJ (eds) Alimentary tract radiology, Vol 1 (3rd ed), C.V. Mosby Co., St. Louis, pp 529-603, 1983.*

Gamba JL, Heaston DK, Ling D, Korobkin M: *CT diagnosis of an esophageal foreign body. AJR 140: 289-290, 1983.*

Handi P, Ong GB: *Foreign body in the esophagus: Review of 2394 cases;. Br J Surg 65: 5-9, 1978.*