



Characters of esophageal motor disturbance of 102 patients with achalasia in China

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Abstract

AIM: To investigate characters of both clinical manifestation and esophageal motor disturbance in Achalsis.

METHODS: One hundred and forty seven cases of diagnosed achalasia were investigated on clinical manifestation and esophageal motor function. A pneumohydrolic capillary perfusion system with an 8 lumen Dent sleeve catheter was used to record esophageal manometry through polygraph after overnight fasting. Subjects received 10 swallows with 5 mL of water during recording.

RESULTS: (1) General data ($n = 147$): 64 male, 83 female (M:F 1:1.2), the mean age was 36.5 years (range: 13 to 77). Eighty five percent was among 20 to 50 years. The mean course of history was 2 years, ranging from 1 mo to 21 years. Clinical manifestation was as follows: dysphagia (100%), regurgitation (82.9%), nocturnal regurgitation (56.5%), chest pain (52.0%), cough or productive

cough (27.8%). (2) Esophageal manometry ($n = 102$): LESP in 78% of cases was < 40 mmHg, 20% between 41-60 mmHg, only 2% was over 60 mmHg. The maximal LESP was 85 mmHg. LES Relaxation rate (LESRR): $< 40\%$ in 47.1% of cases, 41%-60% in 49%, $> 60\%$ in 3.9%. Transient LES relaxation (TLESR) appeared in 36.3% of cases. One TLESR occurred in 20.6% of cases, 2 TLESRs in 10.8%, 3 TLESRs in 3.9%, and 4 TLESRs in 2.9% during esophageal manometry. The mean duration of TLESR was 13.7 s (12-48 s). Thirty six cases (35.2%) showed LES contraction after TLESR, mean amplitude was 83.6 mmHg (35-150 mmHg). Motor pattern of esophageal body included 3 types: that is, hypomotor type (amplitude of contraction < 10 mmHg, 27.5%), potent type (amplitude of contraction > 60 mmHg, 10.8%), disturbed type (irregular contraction, amplitude < 60 mmHg, 61.7%). No abnormality of UES was detected.

CONCLUSION: Our study showed characters from 102 Chinese Achalasia, that is, (1) considerable cases did not have very high LESP, (2) TLESR could occur in 36.3% of patients, and (3) there were 3 types of motor pattern of esophageal body. These data will be helpful for understanding on pathophysiology, involved level, severity, which will help for further therapy. More investigations on TLESR need to be explored.

Key words: Achalasia; Esophageal manometry

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