Standard Oesophageal Manometry in Healthy Adults in Singapore

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Abstract

Data on oesophageal manometry in normal subjects in the East are limited. The aim of this study was to define standard oesophageal pressure values in a group of healthy adults in Singapore. Standard oesophageal manometry was performed on 26 asymptomatic volunteers (12 males and 14 females, aged 19 to 34 years) using the water-perfused capillary system and stationary pull-through technique. Median (range) lower oesophageal sphincter pressure, distal oesophageal contractile amplitude, distal oesophageal contractile duration and distal oesophageal contractile velocity were 13.6 (8.0 to 32.0) mmHg, 93.0 (41.0 to 143.0) mmHg, 3.8 (3.2 to 5.3) s and 3.6 (2.2 to 4.6) cm/s respectively. They were similar in males and females except for distal oesophageal contractile velocity which was higher in males than females [4.0 (3.1 to 4.6) cm/s versus 3.2 (2.2 to 4.4) cm/s, P <0.01]. They were also generally in line with published normal values from Western countries. The present study helps to establish standards for normal manometric findings, at least among the young adults, in this part of the world.


Key words: Diffuse oesophageal spasm, Lower oesophageal sphincter, Oesophageal contraction, Oesophageal motility, Oesophageal peristalsis

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