Pneumomediastinum after sneezing

A previously healthy 37-year-old man with an upper airway viral infection presented with a progressive onset of neck pain with odinophagia and pretracheal tenderness after repetitive sneezing efforts. Upon examination, cervical subcutaneous emphysema was the only finding. The chest radiograph confirmed the presence of pneumomediastinum. Cervical and chest CT scans performed during a Valsalva manoeuvre identified bilateral laryngoceles with a rupture in the left one and perilaryngeal air extending to the subcarinal level (fig 1).

Laryngoceles are dilations of the laryngeal sacculae, usually unilateral, more commonly found in men and classified into internal, external or mixed (about 50% of cases).¹ The aetiology of laryngoceles is still unknown; they may be related to congenital defects or anatomical variations, but a causal association with activities related to an increase in airway pressure such as playing brass instruments has also been advocated.

Owing to the transient increase in airway pressure, sneezing might act as a trigger for the development of pneumomediastinum,²

especially in patients with structural abnormalities such as the presence of laryngoceles, as in our case.

R Souza,^{1,2} C Figueiredo,² A J Rocha²

¹ Pulmonary Department, University of Sao Paulo Medical School, Sao Paulo, Brazil;

² Fleury Research Institute, Sao Paulo, Brazil

Correspondence to: Dr R Souza, Pulmonary Department – Heart Institute, University of Sao Paulo Medical School, Av. Dr. Eneas de Carvalho Aguiar, 44, Sao Paulo, Brazil 05403-000; rogerio.souza@incor.usp.br

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Figure 1 Cervical and chest CT scans performed during a Valsalva manoeuvre showing bilateral laryngoceles (white stars) with a rupture in the left one (black arrow) and perilaryngeal air extending to the subcarinal level (white arrows). (A) Transverse view; (B) coronal view; (C) three-dimensional reconstruction of air column.