Suture thread: An unusual etiology of tracheal pseudotumor

Adelaide Alves*; Sofia Neves; José Almeida
Pulmonology Service of the Hospital Center of Vila Nova de Gaia / Espinho, Vila Nova de Gaia, Portugal.

*Corresponding Author: Adelaide Alves
Pulmonology Service of the Hospital Center of Vila Nova de Gaia / Espinho, Vila Nova de Gaia, Portugal.
Email: adelaide.pereira.alves@gmail.com

Description

A 66-year-old man ingested sodium hydroxide in a suicide attempt in June 2018. In emergency room, he presented burning of the tongue and uvula and supraglottic and vocal cords edema. Because of the risk of airway obstruction, the patient underwent endotracheal intubation and started invasive mechanical ventilation. Five days later, a surgical tracheostomy was performed due to a large laryngeal necrosis including extensive epligottis involvement. After prolonged mechanical ventilation through tracheostomy, the patient presented a favorable clinical course allowing ventilator weaning and decannulation 2 months after initial presentation. In February 2019, cervical Computed Tomography (CT) revealed a polypoid lesion occupying 25% of the tracheal lumen, with contrast uptake and suggestive of malignant etiology (Figure 1A-B). The patient was asymptomatic. Rigid bronchoscopy showed that the pseudotumoral tracheal lesion corresponded to granulation tissue around suture thread from the previous tracheostomy, which were successfully removed during the procedure (Figure 1C-E). Pathological examination showed granulation tissue with extensive inflammatory infiltrate and foreign-body giant cell reaction.

The formation of granulation tissue and tracheal stenosis are recognized late complications of tracheostomy. Endo-tracheal foreign bodies may increase the risk of these complications mimicking malignant lesions. Bronchoscopy plays a key role in the diagnosis and treatment of these complications [1,2].

Figure 1: (A) Computed tomography axial scan revealing a polypoid lesion occupying 25% of the tracheal lumen; (B) The same lesion in the computed tomography sagittal scan; (C) Suture thread and granulation tissue on the anterior wall of the trachea; (D) After suture thread removal; (E) After removal of granulation tissue by rigid bronchoscopy; (F) The removed suture thread.
References
