

A giant laryngeal granuloma arising after an extreme psychological stress

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Abstract

A giant granuloma obstructing the upper airway in a 21-year-old male is described. It arose after an extreme psychological stress. The patient underwent microlaryngoscopic removal of the granuloma, with no recurrence. This case confirms the role of psychological stress in the pathogenesis of laryngeal granulomas, that can reach huge dimensions.

Key Clinical Message

This case confirms the role of psychological stress in the pathogenesis of laryngeal granulomas, that can reach huge dimensions causing airway patency obstruction in rare cases.

Laryngeal granulomas are commonly considered related to laryngopharyngeal reflux and voice abuse, but the pathogenesis is still controversial.¹

A 21-years-old male underwent videolaryngoscopy in our ENT service for persistent dysphonia, effort dyspnea, globus sensation, and chronic throat clearing with progressive worsening. In the previous three years he had undergone three microlaryngoscopic removals of a huge laryngeal granuloma.

His first symptoms arose at the age of eighteen after an extreme psychological stress, when his 5-years-old brother suffered from a devastating hemorrhagic stroke.

Videolaryngoscopy demonstrated a bulky whitish granulomatous lesion rising from the medial surface of the left arytenoid and ventricular band [Figure 1]. The supraglottis was significantly obstructed.

Medical treatments (steroids and proton pump inhibitors) and voice therapy determined no improvements.

The mass was removed under direct microlaryngoscopy by cold instruments and electrocoagulation of its vascular pedicle [Figure 2], and a 0.5 ml of triamcinolone suspension was injected into its base.

Histopathology of the lesion showed squamous mucosa with underlying granulation tissue and acute inflammation, compatible with laryngeal pyogenic granuloma.

After surgery, psychotherapy and further voice therapy were advised; no recurrence of mass was found at the 12 months follow-up [Figure 3].

The described case confirms the relevance of psychological stress in the pathogenesis of laryngeal granulomas.²

Author Contributions

Jacopo Ettori, design of the work, manuscript drafting, participation in surgery, patient follow-up; **Alessandra D’Onghia**, manuscript revision, participation in surgery; **Lorenzo Pignataro**, manuscript

revision, clinical supervision; **Giovanna Cantarella**, design of the work, revision of the manuscript, performing surgery, patient follow-up.

Disclosure

The authors declare no conflict of interest.

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