# Delayed airway extrusion of type 1 thyroplasty Gore-Tex implant

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### **DESCRIPTION**

In March 2005, a 46-year-old woman suffered with a right-sided unilateral idiopathic vocal fold palsy that failed to recover. She underwent type 1 thyroplasty where a length of Gore-Tex ribbon was implanted via an external approach in order to medialise the paralysed vocal fold and so as to improve voice quality.

After an initially excellent response to the procedure and voice therapy, she was discharged from follow-up in December 2005. In 2015 she developed dysphonia and flexible nasendoscopy demonstrated an anterior commissure polyp with an overlying granulation tissue (figure 1). The edge of the implant was also seen extruding into an otherwise stable airway. The patient declined CT scanning and open removal of the implant, choosing instead to proceed to examination under an



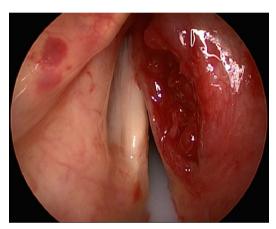
**Figure 1** Implant extrusion into airway with associated granulation tissue presenting a potential airway compromise.



**Figure 2** The implant is removed intact endoscopically with a standard microlaryngoscopy set up and jet insufflation.

anaesthetic and endoscopic removal of the implant (figures 2 and 3). The patient recovered uneventfully and has declined a further medialisation procedure. Her voice has recovered with no swallowing difficulties (figure 4).

This was a popular technique for vocal cord medialisation. However, the current favoured technique is injectable materials such as hyaluronic acid. Compilations such as rejection and extrusion of Gore-Tex implants following external approach thyroplasty have been reported at early stages but literature review did not reveal such a late manifestation. This case is important because it highlights



**Figure 3** Postextraction view. The implant was removed intact but there was a significant tissue deficit in the right vocal fold.



**Figure 4** Six weeks postprocedure endoscopic view. The mucosal covering of the vocal folds had completely re-epithelialised.



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## Images in...

that extrusion of this material is possible at this late stage with potentially life-threatening consequences.

## **Learning points**

- Extrusion of implants can occur at unexpectedly late stages.
- Such complications can be airway obstructing and life-threatening.

Contributors JM wrote the manuscript and supervised by DMT.

**Competing interests** None declared.

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