

## Air leak without subcutaneous emphysema in an adult patient due to thyroidectomy

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To the Editor,

A total thyroidectomy may result in several major complications with emphysema, bilateral pneumothorax and pneumomediastinum having been reported [1]. Laryngeal nerve injury and hypoparathyroidism may occur. Moreover, airway obstruction is another complication that may appear due to the risk of bleeding and hematoma formation. On the other hand, airway obstruction can be also presented with the collection of air in the pretracheal compartment [2]. Although esophageal perforation following a thyroidectomy has also been reported, it was presented with fluid collection in the left neck. Cervical spinal cord injury is a rare but serious complication following a total thyroidectomy [3]. An unusual combination of dynamic supraglottic, glottic, subglottic and intrathoracic airway obstructions following a total thyroidectomy has been presented [4].

Usually, most postoperative complications are potentially life-threatening, remarkable and sensational. However, an asymptomatic case with a tracheocutaneous fistula was not reported in adult patients after a thyroidectomy.

A 51 year-old female patient developed a tracheocutaneous fistula at both ends of the incision border after thyroid

surgery. The patient was presented with air leak which was observed at the neck in the early postoperative period (Fig. 1A). Two fistula openings were observed at 3 cm distal to the vocal cords at the trachea by a fiber-optic scope (Fig. 1B). Fistula openings were covered with the application of a 16 × 14 × 16 mm silicone stenotic stent (Fig. 1C). Air leak through the skin was ceased. The patient was asymptomatic on follow up and the stent was removed during the 7th month of treatment when the fistula openings were observed to be totally closed.

In conclusion, several complications may occur following thyroid surgery. Mostly these are major complications with associated symptoms. Although tracheocutaneous fistula may be observed more frequently in children, it is a rare complication for adult patients and can be repaired by silicone stents with the use of a fiber optic scope.

### ACKNOWLEDGEMENTS

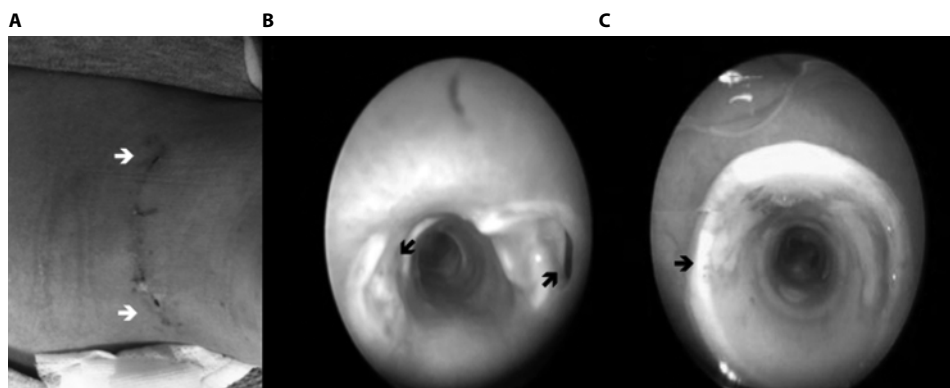
1. Source of funding: none.
2. Conflict of interest: none.

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**Figure 1.** Air leak which was observed in the neck (A) in the early postoperative period following thyroid surgery. A tracheocutaneous fistula (B) was observed during endoscopy and covered with the insertion of a silicone stent (C)

**Należy cytować wersję:** Dalar L, Saracoglu A, Tolga Saracoglu K, Kocatürk C. Air leak without subcutaneous emphysema in an adult patient due to thyroidectomy. *Anaesthesiol Intensive Ther* 2017, vol. 49, no 2, 173. doi: [10.5603/AIT.a2017.0017](https://doi.org/10.5603/AIT.a2017.0017).