Quick recognition of a threatened airway in a patient with a swelling in the neck

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DESCRIPTION

An 80-year-old Caucasian man visited the ear, nose and throat outpatients' clinic with a progressive swelling in the neck, acute dyspnoea and a mild inspiratory stridor. Furthermore, he experienced progressive swallowing disorders. Since 1995 he has been known with an asymptomatic

benign goitre for which he did not receive treatment. The patient was admitted to the hospital and during admission he developed progressive dyspnoea with desaturations and an increase of the inspiratory stridor. Physical examination revealed a very large swelling in the lower part of the neck (figure 1), fluctuating during palpation. The patient underwent endotracheal intubation for

Figure 1 A picture of an 80-year-old intubated patient with an asymmetrical multinodular goitre, which compresses the trachea, leading to dyspnoea and an inspiratory stridor.

Figure 2 CT scan of the neck and thorax of an 80-year-old intubated patient with a large multinodular goitre and tracheal compression.

Figure 3 Anatomical structures in a CT scan of the neck and thorax of an intubated patient with a large multinodular goitre and tracheal compression.

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airway protection. Fiberoptic equipment was prepared prior to that however a normal intubation was possible without complications.

Laboratory studies revealed subclinical hyperthyroidism. CT scan of the neck showed a multinodular goitre with tracheal compression (figures 2 and 3). The patient was transferred to a head-neck centre where they performed a total thyroidectomy. The patient could be extubated 1 day after surgery. Pathology studies revealed a nodular hyperplasia, consistent with multinodular goitre.

Despite sufficient iodine uptake through nutrition in Western countries, goitre remains a common condition.¹ Symptoms develop through compression of vital structures in the neck or upper thoracic cavity. A large goitre can even lead to tracheal compression.² This image shows an impressively large goitre that is not seen regularly in Western countries, but should be recognised as a potentially dangerous condition. When the first signs of a threatened airway present, admission to an intensive or medium care unit is necessary to monitor these patients closely.

Learning points

- ▶ Goitre may occasionally cause tracheal compression.
- ▶ Dyspnoea and an inspiratory stridor are the first signs of a threatened airway.
- ▶ Every patient with an inspiratory stridor should be closely monitored on an intensive or medium care unit.

Competing interests None.

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