

Incidental papilar carcinoma and large goitre in extremely obese patient with excessive daytime sleepiness

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Introduction

In adults, the most common cause of obstructive sleep apnea is obesity. Other causes are anatomical craniofacial bony abnormalities, neurologic syndromes, alcohol and sedatives use, hypothyroidism, acromegaly and rarely thyroid goiter. Untreated obstructive sleep apnea can lead to serious complications, including cardiovascular diseases, accidents, and premature death.

Case report

A 56-year-old patient was referred to a pulmonologist due to excessive daytime sleepiness. Patient has primary hypothyroidism adequately treated with a constant daily dose of levothyroxine (LT4). The scores for the Epworth sleepiness scale was 18. The severe Obstructive sleep apnea (OSA) was confirmed by polysomnography (Respironics Alice 5): apnea-hypopnea index (AHI) was 32.6/h. Spirometry showed a restrictive pattern related to obesity. Due to primary hypothyroidism and obesity examination by an endocrinologist was advised. Patient was extremely obese—BMI 45.3kg/m² with neck of 50cm in circumference and large goitre.

Ultrasonography of the neck revealed a large goiter with significant retrosternal propagation and some thyroid nodules. Volume of the right lobe was 120ml, whereas the volume of the left one was 92ml with a tracheal compression. Due to large goiter a total thyroidectomy was conducted. Pathohistology report was showed chronic lymphocytic thyroiditis and papilar carcinoma with diameter of 1.8 cm in the left lobe. The patient postoperatively received therapeutic dose (3.7 GBq) of ¹³¹I. There were no significant changes of the patient's weight. Six months after the surgery polysomnography was repeated. A mild form of OSA (AHI 12.3/h) was present.

Conclusion

Thyroid cancer coincided with large goiter which was an additional cause together with extreme obesity for OSA. In obese patients with excessive daytime sleepiness, additional endocrine causes of OSA should be considered.

