This was a retrospective review of patients presenting with euthyroid goiter causing tracheal compression. The objective of the current study is to demonstrate a relationship between tracheal compression from goiter and obstructive sleep apnea (OSA). Demonstrate a relationship between tracheal compression and OSA. Evaluate the effects of total thyroidectomy for euthyroid goiter causing tracheal compression.

METHODS & MATERIALS

This retrospective study of 8 patients with euthyroid goiter causing tracheal compression

RESULTS

8 patients with goiter and compressive symptoms presented to the author between January 2004 and December 2007. All patients reported at least 2 episodes of inspiratory and some degree of dyspnea to solids. 3 patients reported nocturnal dyspnea independent of position. 2 patients were known to have had OSA prior to their evaluation for goiter by the author. The remaining 6 patients had histories of snoring and/or daytime somnolence and were evaluated with sleep study. Thyroidectomy was performed in all patients. The changes in compressive symptoms were reported by patients in the immediate postoperative period. Patients were placed on long term thyroid hormone replacement as serologically determined. AHI 16 (Postop AHI 1)

CONCLUSION

OSA may be common in patients with compressive thyroid goiter. Total thyroidectomy to relieve tracheal compression can be an effective treatment to significantly reduce obstructive sleep apnea in patients with compressive thyroid goiter who have OSA. Evaluation of patients with OSA should include screening for tracheal compression from goiter. Compression of the airway at the level of the trachea may be an important contributor to the presence of OSA. Further study will be necessary to define the relationship between goiter, tracheal compression, and OSA.

REFERENCES


Fig. 5. Comparison of preoperative and postoperative AHI (p < 0.05).

Fig. 6. Postoperative AHI as a percentage of preoperative AHI (mean reduction 45.0%).