Unveiling Thyroid Challenges in Acromegaly: A Compelling Case of a patient with acromegaly and thyromegaly.

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Introduction

•Acromegaly, characterized by excessive growth hormone (GH) secretion, often leads to various comorbidities such as type 2 diabetes, cardiovascular disease, and sleep apnea.

•Thyroid-related issues, including multinodular goiter and thyroid cancer, are also observed in these patients.

•We present a compelling case of a 41-year-old woman with acromegaly-associated thyromegaly, emphasizing the significance of comprehensive thyroid assessment in acromegalic patients.

Case Presentation

•A 41-year-old woman presented with headaches, vision disturbances, syncope, and obstructive neck symptoms. Imaging revealed a pituitary macroadenoma.

•Laboratory tests indicated elevated insulin-like growth factor-1 (IGF-1) and random growth hormone (GH) levels.

•She underwent endoscopic endonasal resection of the adenoma, Persistent mild elevation of GH levels post-surgery prompted consideration of stereotactic radiotherapy and/or somatostatin receptor ligand therapy.

•A concurrent thyroid evaluation revealed a large goiter with mediastinal extension and tracheal compression, which was managed through total thyroidectomy.

•The patient's pituitary adenoma was a PIT1 lineage sparsely granulated somatotroph adenoma, prone to early recurrence.

•Thyroid pathology demonstrated benign multinodular thyroid hyperplasia.

Discussion

•Acromegaly is frequently linked to thyroid enlargement and nodularity, with up to 55% of patients exhibiting multinodular goiters.[2]

•Approximately 25% of these cases involve toxic multinodular goiters.[1]

•Additionally, thyroid cancer incidence in acromegaly patients is reported to range from 1.2% to 4.3%.

•This case underscores the importance of thorough thyroid evaluation in acromegalic patients, with consideration of acromegaly screening in individuals presenting with concerning features alongside multinodular goiters.

Conclusion

•This case report illuminates the intricate relationship between acromegaly and thyroid challenges, showcasing the prevalence of thyroid enlargement, nodularity, and potential thyroid cancer in this population.

•Robust thyroid assessment in acromegaly patients is paramount for timely diagnosis and intervention.

•Notably, individuals presenting with multinodular goiters should be vigilantly evaluated for acromegaly if accompanying features warrant concern.

•Our findings emphasize the necessity of comprehensive multidisciplinary care to manage the diverse manifestations of acromegaly effectively.

References

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Note: Chatgpt was used while making this abstract.

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