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.

• 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.

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


Note: Chatgpt was used while making this abstract.

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