including a 1.8 cm hypoechoic, complex nodule in the left inferior gland and a 1.7 cm isoechoic nodule in the right inferior gland. Fine needle aspiration of the left nodule was suspicious for papillary thyroid carcinoma and the right nodule showed lymphocytic thyroiditis. The patient underwent total thyroidectomy and pathology demonstrated a benign left nodule and an incidental 0.3 cm right papillary thyroid carcinoma. The patient started levothyroxine 150 mcg daily (1.8 mcg/kg) post-operatively with subsequent TSH of 18.1 mcIU/mL. His dose was increased to 200 mcg daily (2.4 mcg/kg) and TSH was still elevated at 11.7 mcIU/mL. His levothyroxine dose was subsequently increased to 250 mcg daily (3 mcg/kg) and TSH is outstanding.
Conclusions: This case highlights the diagnostic challenge in nonTR-RTH. It also demonstrates the complex management of patients with RTH and concurrent hypothyroidism. Such patients need close monitoring and aggressive titration of levothyroxine to achieve desired hormone levels.
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Thyroid

THYROID NEOPLASIA AND CANCER

Comorbidity of Primary Hyperparathyroidism and Papillary Thyroid Cancer. A Single Center Outcomes

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IntroductionConcurrence of primary hyperparathyroidism in patients with thyroid disease has been previously reported by several studies. However, comorbidity between primary hyperparathyroidism (PHPT) and papillary thyroid cancer (PTC) has been sparsely described by previous, mostly case-series studies, and is considered rare. Since pathophysiological mechanisms behind the two diseases are supposed to be different, any link between these diseases has not been explained as yet.Hypothesis:Aim of the study was to investigate the possible concurrence for the two diseases in people who underwent thyroidectomy for suspected thyroid nodules. Methodology Retrospective observational study that included 2913 patients (24% men with mean age 49.82 yrs, 76% women mean aged 47.73 yrs), who underwent total thyroidectomy during the last 13 years (2005-2018) at the Department of Endocrine Surgery, Euroclinic Hospital, in Greece. The patient-groups were categorised according to histopathology criteria of the thyroid and/ or parathyroid glands (in case of comorbidity of primary hyperparathyroidism (PHPT) diagnosed prior to surgery). Results: Statistical analysis revealed benign histopathology findings in 1945 patients (64%), while papillary cancer was found in 978 (32%). Among patients with non-malignancy, 16 (11 women/5 men) had PHPT, but in those with papillary cancer, PHPT was diagnosed in 38 (33 women/5 men) individuals. The relative risk for the concurrence of PHPT and PTC was 2.033 (95%CI 1.69 to 2.43, P<0.0001). Age groups between 30 and 60 yrs were associated with the highest relative frequency of comorbidity (82%). A significant positive correlation was observed between less aggressive PTC histopathology findings and PHPT concurrence (P<0.0001). Interestingly, no patient with PTC and PHPT had either capsular invasion or regional/distant metastases. Moreover, most patients with comorbidity (92%) had a tumour diameter smaller (mean 6.3 mm) than those with PTC alone (mean 18 mm). Conclusions:Our study found that the comorbidity between primary hyperparathyroidism and PTC may be considered as possible. Endocrinologist's diagnostic approach may add serum calcium and parathormone levels in patients who undergo evaluation for suspected thyroid nodules. Patients with PHPT and PTC had mostly microcarcinomas, and histopathology findings showed a less aggressive PTC pattern. Further large cohorts as well as genetic studies, are needed to duplicate our results and further highlight possible common pathogenetic pathways behind PHPT and PTC concurrence.

Thyroid

THYROID CANCER CASE REPORTS II

Encapsulated Follicular-Variant of Micropapillary Carcinoma Presenting with Distant Bony Metastasis

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INTRODUCTION The incidence of thyroid cancer has risen steadily over the last decades, in part due to increasing diagnosis of apparently low-risk well-differentiated cancers. The outcomes of well-differentiated thyroid cancers, including follicular variant papillary thyroid carcinoma (PTC), are believed to be quite favorable, with a largely indolent benign course. We examine an encapsulated follicular-variant of micropapillary carcinoma presenting with distant bony metastasis. **CASE** 55-year-old lady presented to clinic after biopsy of iliac crest (IC) mass revealed thyroid tissue. One year prior she started having dull pain at right hip, attributed to increased physical activity. She noticed a tender "lump" on her right hip. CT revealed destructive right iliac 8 cm mass with extraosseous soft tissue component, central necrosis, and eccentric calcifications; and right ovarian cyst. Right IC biopsy was consistent with thyroid tissue with positive Thyroglobulin and TTF-1 immunostains. Physical exam was normal, except for mild tachycardia, hypertension, right flank large rounded mass fixed to IC, tender to palpation without erythema or warmth on overlying skin. Thyroid ultrasound showed normal thyroid gland except 5.58 x 6.22 x 7.76 mm left lobe nodule without increased vascularity but with coarse peripheral calcification. FNA was unsatisfactory. Thyroid function tests revealed undetectable TSH, elevated FT4, FT3, and