had significant interval increase in anti-TPO titer by >12 units (2×6 [precision of the anti-TPO assay in normal range being 6 units per SD]), of these, four became anti-TPO positive. Factors associated a significant increase in anti-TPO titer included worse baseline clinical severity (p=0.018), elevated C-reactive protein during hospitalization (p=0.033), and higher baseline anti-TPO titer (p=0.005). **Conclusion:** Majority of thyroid dysfunction on admission recovered during convalescence. Abnormal TFTs suggestive of thyroiditis could occur during convalescence, though uncommon. Importantly, we provided the novel observation of an increase in anti-thyroid antibody titers post-COVID-19, suggesting the potential of SARS-CoV-2 in triggering thyroid autoimmunity, which warrants further follow-up for incident thyroid dysfunction among COVID-19 survivors.

Thyroid

THYROID AUTOIMMUNITY, COVID-19 & THYROID DISEASE

Management of Thyrotoxicosis Induced by PD1 or PD-L1 Blockade

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Context: Thyrotoxicosis is a common immune-related adverse event in patients treated with PD1 or PD-L1 checkpoint inhibitors. A detailed endocrinological assessment, including thyroid ultrasound and scintigraphy is missing, as are data on response to treatment and follow-up. **Objectives:** To better characterize the thyrotoxicosis secondary to immune checkpoint inhibitors, gaining insights into pathogenesis and informing management. **Methods:** We conducted a prospective cohort study of 20 consecutive patients who had normal thyroid function before starting immunotherapy and then experienced thyrotoxicosis upon PD1 or PD-L1 blockade. Clinical assessment was combined with thyroid ultrasound, scintigraphy, and longitudinal thyroid function tests. **Results:** Five patients had normal scintigraphic uptake (Sci+), no serum antibodies against the TSH receptor, and remained hyperthyroid throughout follow-up. The other 15 patients had no scintigraphic uptake (Sci-) and experienced destructive thyrotoxicosis followed by hypothyroidism (N= 9) or euthyroidism (N= 6). Hypothyroidism was more readily seen in those with normal thyroid volume than in those with goiter (P= 0.04). Among Sci- subjects, a larger thyroid volume was associated to a longer time to remission (P<0.05). Methimazole (MMI) was effective only in Sci+ subjects (P<0.05). **Conclusions:** Administration of PD1 or PD-L1 blocking antibodies may induce two different forms of thyrotoxicosis that appear similar in clinical severity at onset: a type 1 characterized by persistent hyperthyroidism that requires treatment with MMI, and a type 2 characterized by destructive and transient thyrotoxicosis that evolves to hypo- or eu-thyroidism. Thyroid scintigraphy and ultrasound help differentiating and managing these two forms of iatrogenic thyrotoxicosis

Thyroid

THYROID AUTOIMMUNITY, COVID-19 & THYROID DISEASE

Managing Thyroid Nodules in Qatar During the COVID19 Pandemic

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Background: The Coronavirus disease 2019 (COVID-19) pandemic impacted health care systems in all countries, including Qatar. Hamad Medical Corporation (HMC); In compliance with recommendations, suspended all non-urgent procedures, including thyroid fine needle aspiration biopsies (FNAB). Thyroid nodules are second most common cause of referral to HMC endocrine clinic. FNABs are gold standard to differentiate benign from malignant nodules.[1-2]
Methods: Our approach includes a teleconsultation to obtain patient's history and risk factors. Reviewing neck ultrasound (US), obtaining a calcitonin level if indicated, considering comorbidities associated with a high risk of COVID-19 morbidity and mortality.[3]
Results: We developed a pathway triaging thyroid (FNAB) to:1-Urgent: patients at higher risk of aggressive thyroid malignancy. Benefits of early detection and treatment outweigh the risk of COVID-19 exposure.[4] FNAB should not be delayed.2-Semi-urgent: patients at low risk for COVID-19 and high suspicion thyroid nodules, but no evidence that early detection improves survival[2], FNAB may be delayed up to 12 months.3-Non-urgent: patients with asymptomatic nodules that have low or intermediate suspicion US pattern.[2] Also, includes nodules with ATA high suspicion US pattern in pregnant women and patients at high risk for COVID-19. The risks outweigh the benefits. FNAB should be delayed until outbreak is controlled.[4] When urgent FNAB is indicated, safety of patients and medical staff needs to be addressed.[5] We recommend testing patient for COVID-19 before FNAB, utilizing US guidance with rapid on-site adequacy evaluation in all cases. Cervical lymph node FNAB with TG washout should be done if indicated. The patient should wear a mask. All medical staff involved should wear personal protective equipment (PPE). The operator should wear N95 mask and face shield. The