Neck Tenderness As an Initial Presentation of Disseminated Aspergillosis: FNA Is an Option or a Must?
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Introduction: Asperillus thyroiditis (AT) has been considered for long time a postmortem diagnosis in immunocompromised patients. Disseminated disease is seen in the majority of patients. Diagnosis of AT during life needs high index of suspicion.

Objective: We describe an adolescent HSCT recipient with painful neck swelling and found to have AT.

Case Report: History: A 15 years-old male with history of Acute Myeloid Leukemia and MUD HSCT who presented initially with painful neck swelling and found to have AT.

Imaging: Thyroid US with diffuse heterogeneous enlargement. CT Chest showed moderate to large areas of pulmonary consolidation bilaterally, with areas of cavitation. Clinical course: He was started on broad-spectrum antibiotics and antifungals. His respiratory and mental status got worse one day after admission needing transfer of care to the Pediatric ICU. His FNA of the thyroid grew Aspergillus Fumigatus. MRI brain showed numerous rounded lesions consistent with disseminated fungal disease, most likely Aspergillus.

Discussion: Our patient had evidence of disseminated invasive aspergillosis involving thyroid, lungs and brain. Initially he had presumed infectious thyroiditis based on his clinical examination and laboratory values that were confirmed to be AT. Thyroid-related symptomatology can be occasionally seen on presentation. Although viral sub-acute and bacterial thyroiditis is more common than fungal one, but in immunocompromised patients AT has to be considered early on. Thyroid US guided FNA cytology and culture is considered to be a well-tolerated procedure that frequently utilized to diagnose AT successfully. Any delay in the management may significantly affect the outcomes where thyroid FNA can play a critical role in the early diagnosis of AT.

Conclusion: The diagnosis of Aspergillus Thyroiditis requires a high index of suspicion and it can be the initial presentation of disseminated invasive aspergillosis. Further studies are needed to evaluate the benefits of combined antifungals and address the management of thyroid hormone dysregulation.