Thyroid membrane involvement in rheumatoid nodules: a rare finding

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A 76-year-old woman with a 19-year history of rheumatoid arthritis (RA) and elevated anti-CCP antibodies presented with progressive constitutional symptoms, including cachexia, over the past two years. The patient denied dysphagia and dyspnea. Her medical history was notable for depressive and anxiety disorders, as well as recent cognitive deterioration.

A cervical CT-scan revealed a suspicious lesion in left thyroid membrane, raising concerns for malignancy (figure 1). A subsequent PET-scan identified a hypermetabolic nodular lesion in the cervical region, specifically in the vallecula, slightly left of the midline. No hypermetabolic malignant adenopathies were found.

Due to the strong suspicion of malignancy, the patient underwent cervicotomy for excision of the lesion. Histopathological examination revealed the nodule to be a rheumatoid nodule, consistent with the granulomatous inflammation typically seen in RA. Tuberculosis screening was negative.

A follow-up cervical CT scan confirmed complete excision of the lesion. The patient's cachexia and constitutional symptoms were ultimately attributed to her underlying autoimmune disease and cognitive decline.

Discussion

Rheumatoid nodules are a common extra-articular manifestation of RA, usually found in subcutaneous pressure areas like the elbows and fingers[1]. Involvement of deeper structures, such as the thyroid membrane or the pre-epiglottic region, is exceedingly rare, with few cases documented in the literature[2,3,4].

Our case emphasizes the importance of considering rheumatoid nodules in the differential diagnosis of cervical masses in patients with long-standing RA. Early identification can prevent unnecessary surgical interventions and guide appropriate management. The pathogenesis of rheumatoid nodules involves immune complex deposition and fibrinoid necrosis, though their formation in atypical sites remains poorly understood[5].

Tables and Figures

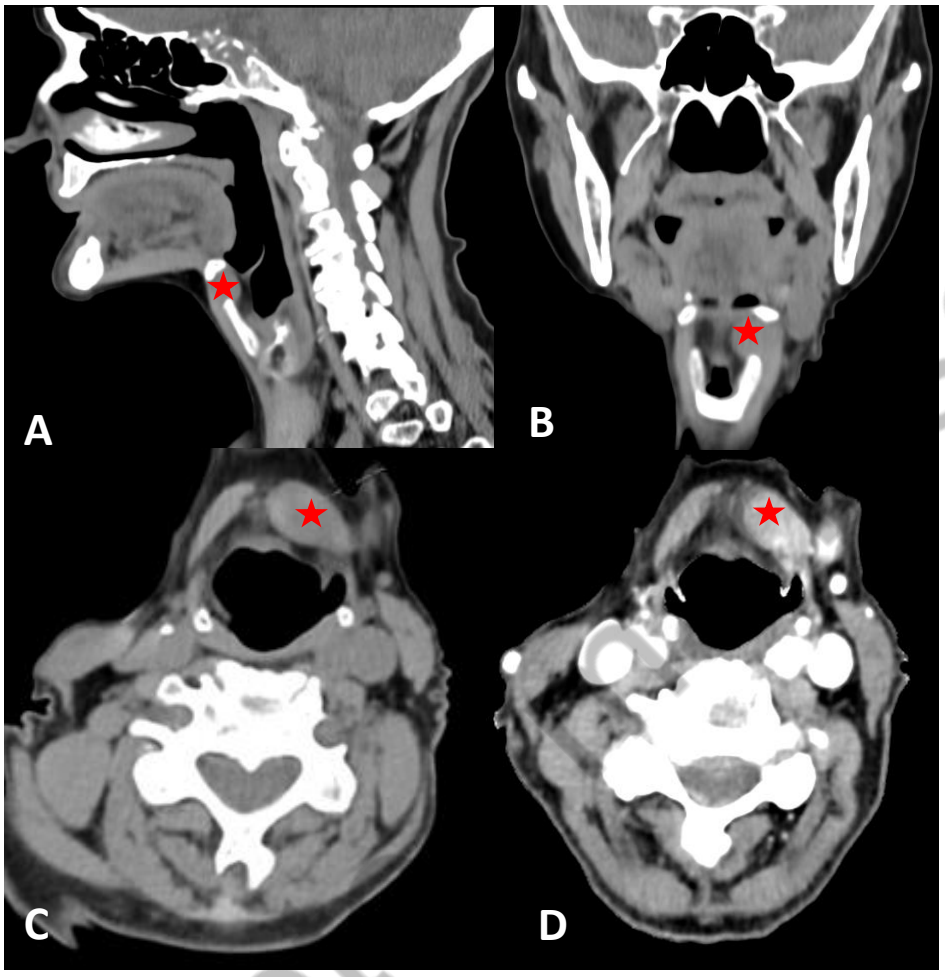

Figure I – CT scan of the neck, sagital (A), coronal (B) and axial (C) views show an ovoid lesion in the left thyroid membrane, located strictly in the submucosal layer, with slight deformation of the vallecula and contrast enhancement (D)

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