Title: Teflon Granuloma of the Larynx: A Rare Complication of Vocal Cord Paralysis Treatment **Authors**: Seti Belay, MD;Mathew Chakko, MD; Adithya Bala, MD **Residency Program**: Henry Ford Providence Hospital/MSUCHM

Introduction

Teflon injection for vocal cord paralysis has been a treatment modality used for decades. However, long-term complications from Teflon injection, such as granuloma formation, are rare but clinically significant. This case report explores a 74-year-old female with recurrent hoarseness and a palpable neck lump, who had a history of Teflon injection 20 years ago.

Methods

The patient presented with hoarseness and a neck lump. A comprehensive workup was performed, including MRI, CT, and PET scans. A differential diagnosis was considered, with particular attention to laryngeal carcinoma, glomus jugulare tumor, and other granulomas.

Results

Imaging revealed a low to intermediate T2 signal on MRI, consistent with granulomatous tissue. CT imaging demonstrated a hyperdense mass due to the fluorine in the Teflon, and PET scan showed increased FDG uptake, mimicking malignancy. These findings, in combination with the patient's history of Teflon injection, led to the diagnosis of Teflon granuloma.

Discussion

Teflon granulomas are formed due to the body's inflammatory response to Teflon injections. The imaging characteristics, including hyperdensity on CT and low to intermediate T2 signal on MRI, are critical in differentiating Teflon granuloma from malignancy. PET scans can show increased FDG uptake, which can sometimes lead to a misdiagnosis of malignancy. Management of Teflon granulomas is complex; surgical removal can be challenging, as it may lead to vocal cord damage.

Conclusion

Teflon granulomas are a rare complication of vocal cord paralysis treatment. Proper imaging interpretation is essential for distinguishing this condition from malignancies and other pathologies, thereby preventing unnecessary interventions.

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