

# Chronic Invasive Fungal Sinusitis of the Inferior Orbital Fissure

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## INTRODUCTION

A 71-year-old patient with DMII presented to the ED for a 4 months history of headaches and new onset diplopia and blurry vision. PE in the ED showed left ptosis and decrease in visual acuity.

CT scan and MRI findings were suggestive of erosion of the left lateral sphenoid wall, inflammatory changes in the pterygopalatine fossa and orbital apex, and a heterogenous density in the sphenoid sinus. He was taken for a sphenoidotomy and biopsy of the lesion with final pathology negative for invasive fungal sinusitis or malignancy.

Despite aggressive treatment with broad spectrum antibiotics and IV antifungals, his symptoms worsened. Repeat HbA1c = 12%.

A repeat MRI did not show interval change. He was then taken for a pterygopalatine fossa exploration and inferior orbital fissure biopsy.

## SURGICAL STEPS & IMAGES



Fig 1. MRI findings suggestive of lesion in left inferior orbital fissure

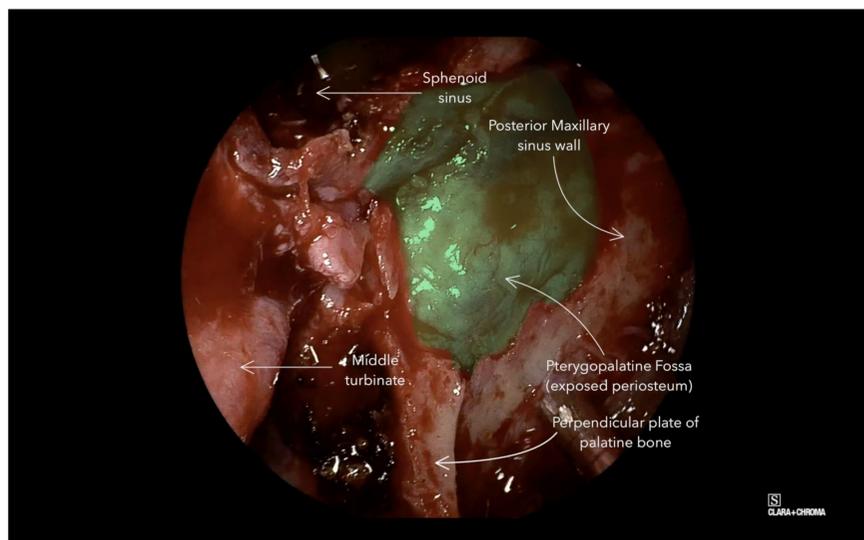


Fig 2. Medial to lateral pterygopalatine fossa exploration

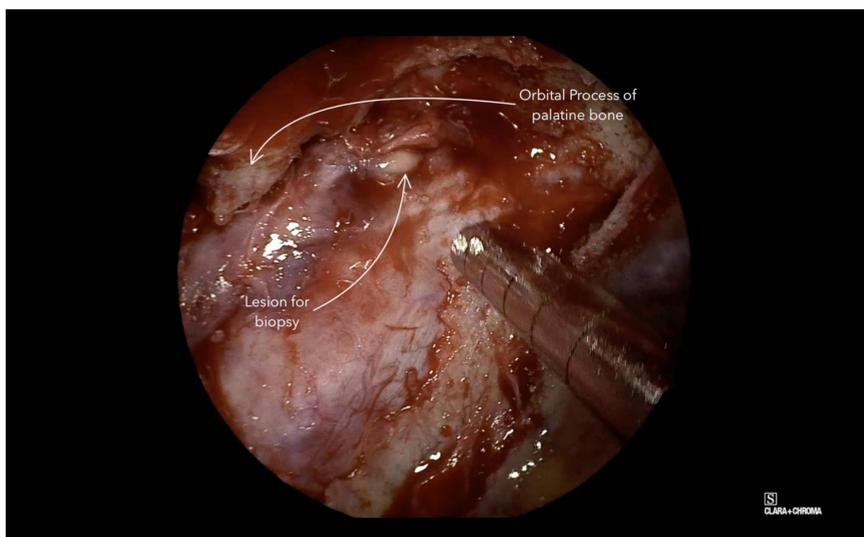


Fig 3. Visualization of the most anterior portion of the lesion in the PPF

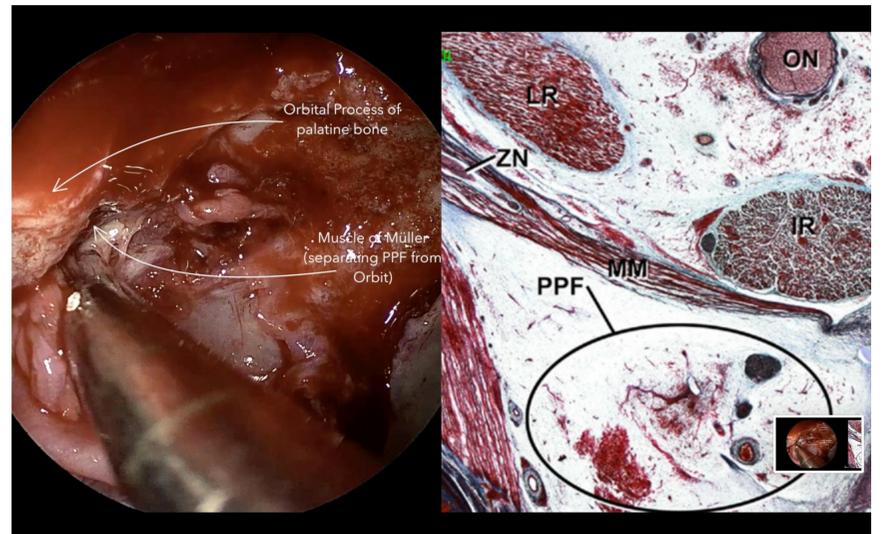


Fig 4. Lesion in relation to the muscle of Müller separating PPF from orbit

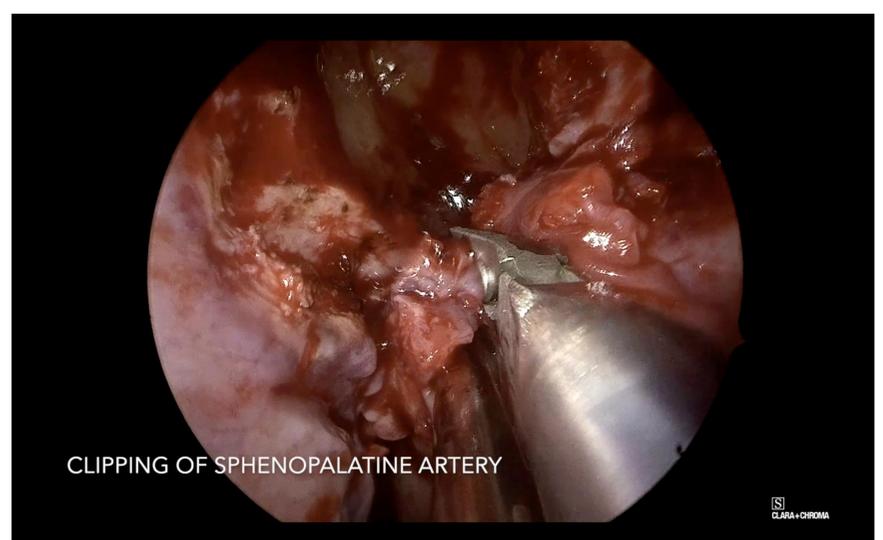


Fig 5. Hemostasis and endoscopic clipping of sphenopalatine artery

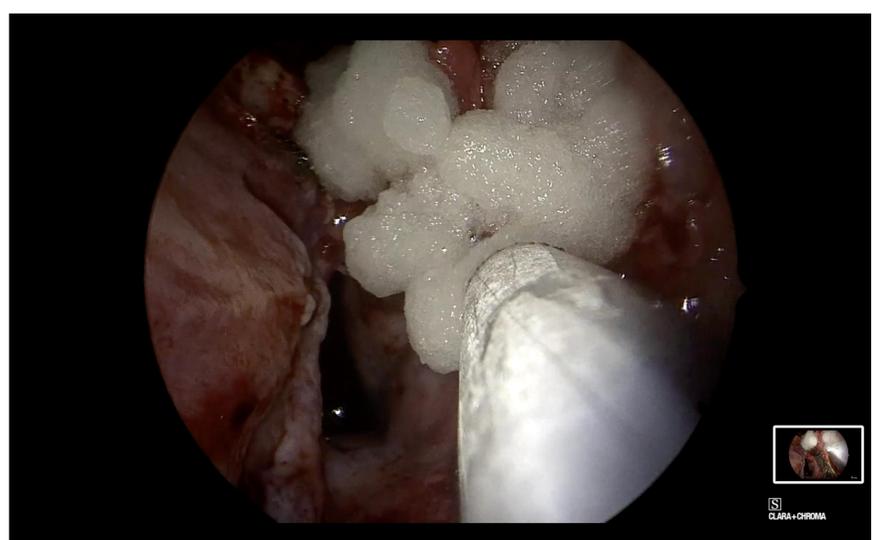


Fig 6. Surgical foam application over raw surgical bed and exposed PPF

## POSTOPERATIVE COURSE

Intraoperative frozen and final pathology were consistent with invasive fungal sinusitis. The patient was placed on IV antifungals, intraocular amphotericin B injections and tight glucose control.

At 3 months postoperative visit, physical examination showed almost complete resolution of his ptosis and major improvement of his visual acuity. Endoscopic examination of the nasal cavity revealed healing surgical bed and mucosa with no complications or scarring.