

Introduction

Deep neck space infections can be fatal and may lack classic presentations including high grade fever and erythematous fluctuance in immunocompromised patients. Surgical intervention is complicated by the risk of injury to superficial nerves.

Case presentation

This is a 57 year old African-American male patient with extensive medical history including uncontrolled Type 2 diabetes, complicated by chronic right plantar foot ulcer, hypertension, hyperlipidemia, and peripheral arterial disease who presented to the emergency department with complaints of 4 day history of painful right sided facial swelling.

On arrival, the patient was afebrile and vital signs were otherwise unremarkable with exception of mild tachycardia. His labs were notable for leukocytosis with white blood cell (WBC) count of 11.3 and hyperglycemia with POC (point-of-care) glucose of 471. Physical examination showed a right sided facial swelling about 4 cm in diameter that was indurated and tender to palpation. The swelling was in front of the right ear, extending over the angle of the mandible. It was not associated with redness or increased warmth. Computed Tomography (CT) of the maxillofacial area with contrast, illustrated in Figure 1, reveals 3.2 x 3.1 x 2.9 cm peripherally enhancing necrotic/cystic mass in the right parotid gland with extensive soft tissue inflammation.

The patient was treated empirically with intravenous (ampicillin/sulbactam) and vancomycin. Bedside aspiration was performed by the otolaryngologist, and the fluid sample obtained was positive for rare yeast, so patient is started on IV Miconazole 100 mg daily, which was continued for the remaining 5 day duration of his hospital stay.

Despite antifungal therapy, the patient was clinically not improving with persisting painful swelling. A follow-up ultrasound of the parotid gland confirms a cavitory lesion measuring 4.4 x 2.6 x 3.8 cm that was not significantly changed in size from prior CT. Given ultrasound findings, the otolaryngologist performed bedside incision and drainage, and the fluid sample was still positive for yeast. The patient was discharged on a 3-week course of oral Fluconazole, with instructions to follow up with otolaryngology within one week. One-week post-discharge, the patient fluid sample results were finalized and found to contain *Candida glabrata*.

Discussion

Candida parotitis cases are rare in immunocompetent patients, and so supporting evidence for management is limited as it is based on only a few case reports. Of note, associated risk factors such as diabetes and HIV seem to facilitate oral colonization, and therefore puts these patients at higher risk. Keeping in mind the lack of consensus in management, it is plausible that patients would most benefit from dual antifungal treatment and surgical intervention.



Figure 1: Computed Tomography (CT) of the maxillofacial area with contrast reveals 3.2 x 3.1 x 2.9 cm peripherally enhancing necrotic/cystic mass in the right parotid gland with extensive soft tissue inflammation.

References

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