

Introduction

Herpes Zoster, or Shingles, is a painful, blistering dermatomal rash caused by reactivation of varicella zoster virus (VZV). Initial infection with VZV typically occurs in childhood, after which the virus may remain dormant within the dorsal root ganglion. Reactivation may occur in older patients (age > 50) and can be associated with immunodeficiency. In the context of Otolaryngology, Shingles may present as blistering facial, oral, or ear canal rash with vesicular lesions that are confined to facial dermatome boundaries. After the acute phase of Shingles has subsided, skin and mucosal changes and sensory deficits may persist for months to years. Post-herpetic neuralgia (PHN) is defined by chronic neuropathic pain lasting at least 3 months in the area previously affected by rash. These symptoms may be debilitating to patients and difficult to treat. There have been few advances to address longstanding symptoms months after resolution of the initial rash.

Case Presentation

A 45-year-old male with past medical history of end-stage renal disease on hemodialysis and gout presented as a referral to Otolaryngology clinic for several months of hyperpigmented oral lesions. On careful history, the patient revealed that approximately seven months earlier, he had developed painful vesicles involving the right forehead, cheek, and hard palate. The initial rash subsided over 1-2 weeks, but he continued with decreased sensation to touch on the right upper and middle thirds of his face. He also developed oral pain when eating. After several months of persistent symptoms, his primary care provider began Gabapentin 300mg daily and Lidocaine mouthwash. Sensation to touch began to improve slowly, however there were persistent skin and mucosal changes. Physical examination revealed a hyperpigmented macular rash of the right V1 and V2 distributions of the facial skin, sparing the lower third of the face. He had similar mucosal lesions over the right hard palate, which were exquisitely painful to touch.

Diagnosis and Treatment

The patient was diagnosed with post-herpetic neuralgia. Gabapentin was increased to 300mg three times daily. A referral to Neurology was placed to consider Shingles vaccination and further symptom management. Although Neurology deferred vaccination at that time, likely due to this patient's immunocompromised status, he was additionally started on 200mg Carbamazepine QHS. Six months later, the patient ultimately did receive the Shingrix vaccination through his primary care provider. Symptoms were improving at subsequent office visits.

Skin and Mucosal Changes



Figure 1: Distribution of facial and oral rash

All photographs used with patient's consent

Discussion

Approximately one million Americans are diagnosed with Shingles annually. The diagnosis is made clinically and is defined by the characteristic appearance of the Shingles rash, which obeys dermatomal distributions. Prompt medical evaluation and appropriate treatment with antivirals such as Famciclovir or Valacyclovir may minimize the duration and severity of pain. The literature suggests that approximately 2-20% of Shingles cases are complicated by post-herpetic neuralgia, which is characterized by pain and allodynia in the region of the original rash. Management largely involves pain control, which may require a multi-modal regimen. Commonly used pharmacologic agents include Gabapentin, Carbamazepine, and tricyclic antidepressants – side effect profiles of these drugs require close monitoring. The literature offers minimal support of corticosteroid therapy.

The Shingles vaccine is indicated for all individuals >50 years old without contraindications to vaccination. Administration of this live-attenuated vaccine must be carefully considered in those with immunosuppression. While this is a growing area of research, there is literature to support vaccination of individuals even after they have had a first episode of herpes zoster.

References

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