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Herpes Zoster: An infrequent case report

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ABSTRACT
Herpes zoster (HZ) or 'shingles' is a painful vesicular rash resulting from reactivation of the varicella-zoster virus that also causes chickenpox. The incidence of HZ infection (HZI) increases with age and the degree of immunosuppression. Post herpetic neuralgia, the most common complication of HZ, occurs after the zoster rash has resolved. Conventional therapies include antivirals, corticosteroids, and analgesics, both oral and topical. Here we report a case of HZ in an 80-year-old woman involving maxillary nerve and the article also reviews various treatment modalities available for the management of HZI.

Keywords: *Herpes Zoster, Shingles, Immunosuppression*

INTRODUCTION:

Herpes zoster (HZ) is an acute infectious viral disease of extremely painful and incapacitating nature which is characterised by inflammation of dorsal root ganglia or extramedullary cranial nerve ganglia, associated with vesicular eruptions of the skin or mucous membrane in an area supplied by the affected nerve.[1] HZ is more commonly known as shingles, from the Latin cingulum, for 'girdle.' This is because a common presentation of HZ involves a unilateral rash that can wrap around the waist or torso like a girdle.[2]

HZ presents as a rash of 2–3 weeks duration in immune competent patients that is accompanied by moderate or severe pain. In some patients, pain does not resolve when the rash heals but continues for weeks and, sometimes, for months or years; this persistent pain is termed 'postherpetic neuralgia (PHN)' and is one of the most common complication of herpes zoster infection (HZI).[1-3] Less well recognised maxillofacial complications include developmental anomalies such as irregular short roots and missing teeth, periodontitis and calcified and devitalised pulps.[1]

Case Report

A 50-year-old man presented with fever, blisters and pain on the left side of his face for the past 2 days. The pain was very severe and burned; it was continuous, radiating up to the forehead and ear, and had a tingling sensation. It got aggravated while eating, drinking and swallowing. One day earlier he had developed multiple vesicles and blisters on the left side of his face, which first appeared on the lower lip and continued to the chin, cheek and forehead; gradually it reached the eye and soon the ipsilateral pinna were also involved. There were multiple vesicles that coalesced to form bullae on the left side of the chin. Skin surrounding the vesicles was erythematous. The hard palate showed 7–8 ulcers on the left side measuring approximately 2–3 mm in diameter, which were round in shape with an erythematous halo and covered with pseudomembranous slough (figure 1).

Hard tissue examination revealed partially edentulous upper and lower arches with generalised attrition of teeth and poor oral hygiene.

INVESTIGATIONS

Exfoliative cytology from ruptured intraoral vesicles was inconclusive.

DIFFERENTIAL DIAGNOSIS

The unilateral distribution of painful, grouped vesicles in a dermatomal pattern suggested HZ. However, allergic stomatitis was ruled out owing to the history and the unilateral presentation of the lesion. Sycosis barbae was excluded by the presence of intraoral lesions and absence of follicular pustules.

TREATMENT

Patients was treated with antiviral and supportive therapy for 1 week. Valacyclovir (1 g, in case 1) and acyclovir (800 mg, in case 2) were prescribed to control the active viral phase. Tramadol hydrochloride (100 mg) and acetaminophen (325 mg) were given to alleviate pain and fever. Topical application of acyclovir cream (5%) was advised for facial and intraoral lesions, three times a day. Lignocaine gel (2%) for local application before meals and a multivitamin preparation, as supportive therapy, were added.

OUTCOME AND FOLLOW-UP

The patient was followed up for 4 weeks, and no recurrences were reported.

DISCUSSION

Varicella-zoster virus is an α-herpes virus which leads to primary infection varicella (chicken pox) and then becomes latent, usually in the dorsal root ganglia or ganglia of the cranial nerves. Reactivation produces HZI, commonly called shingles.[4] The virus enters the host via the respiratory system, replicates at an undefined site (presumably the nasopharynx), infiltrates the reticuloendothelial system and eventually makes its way into the bloodstream.[2]

HZI of the skin (shingles) is more common in adults and starts with a prodrome of deep, aching and burning pain. There is usually little to no fever or lymphadenopathy. This is followed within 2–4 days by the appearance of crops of vesicles in a dermatomal or zosteriform pattern.[4] The lesions usually begin to dry and scab 3–5 days after appearing. Total duration of the disease is generally between 7 and 10 days; however, complete healing may take more than 4 weeks.[5]

Involvement of the trigeminal nerve leads to lesions on the upper eyelid, forehead and scalp with V1, midface and upper lip with V2 and lower lip with V3. With the involvement of V2, patients experience a prodrome of pain, burning and tenderness, usually on the palate on one side. So, in present case maxillary nerve (V2) is involved as the lesions were present on the midface and palate.

The most common complication associated with HZ is the development of PHN, a condition where pain persist for months and sometimes years after the rash resolves.[6,7] PHN is of particular concern with increasing age because it is estimated that half the individuals over age 50 who develop shingles also develop PHN.[3] In our case also pain was persisting even after the vesicles are subsided for more than 30 days duration.

Other potential complications of HZ include encephalitis, myelitis, peripheral nerve palsies and forms of contralateral hemiparesis. An uncommon complication of HZI involving geniculate ganglion is Ramsay Hunt syndrome. Patients develop Bell's palsy, vesicles of the external ear and loss of taste sensation in anterior two-third of the tongue.[5]

Schwartz and Kvoring reported 10 cases of HZ with postherpetic complications including osteonecrosis of jaw, exfoliation of teeth, severe periodontitis and scarring of the skin.[1] In our case also the patient had severe periodontitis and mobility of the teeth and also an extraction socket which showed delayed healing.

CONVENTIONAL TREATMENT OPTIONS

The objective of conventional therapy in the treatment of HZ is to accelerate healing of the lesions, reduce the accompanying pain and prevent complications.

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LEGEND:

Figure 1: Ulcers involving the left hard and soft palate.