Mandibular Osteomyelitis as a Complication of Ramsay Hunt Syndrome in an Elderly Patient

Sir,

We report a case of an elderly man who was undiagnosed and untreated for herpes zoster. His untreated condition progressed, leading to occurrence of Ramsay Hunt Syndrome (RHS) and osteomyelitis of mandibular jaw bone. RHS is a viral infectious disease that is caused by the reactivation of latent varicella zoster virus in geniculate ganglion of the seventh cranial nerve and is characterised by otalgia, facial paralysis, and vesicle formation.1 Involvement of vestibulocochlear nerve together with facial nerve causes hearing loss, vertigo, tinnitus, nausea, vomiting and nystagmus.2 Here is a rare complication of RHS associated osteomyelitis of mandible. Very few case reports are available in the literature which have shown osteomyelitis of maxillary or mandibular arch associated with RHS.3-5

A 69-year-old male patient’s face was asymmetrical with hypopigmented patches, extending from temporal region to chin area and ruptured vesicles with crust formation, were seen on tragus of ear, forehead and scalp. Due to facial paralysis on the left side of the face, the patient was unable to close his left eye with obliterated nasolabial fold, absence of wrinkles on forehead, drooping left corner of the mouth and shift in the axis of the upper lip to the right. Oral examination revealed exposed and necrotic mandibular alveolar bone, extending from left mandibular incisor to premolars with exfoliation of teeth. Based on clinical history, signs and symptom, diagnosis of RHS with osteomyelitis of mandible was made. The patient had not received any medical consultation or treatment for herpes zoster infection. He was immediately referred to the dermatologist for initial treatment, and was started with antiviral (oral acyclovir 800 mg five times daily for seven days) and antibiotic therapy (amoxicillin and clavulanic acid 625 mg three times daily for five days and metronidazole 400 mg three times daily for 5 days). The patient was then referred to the ENT surgeon for consultation, who revealed secondary infection of ear and partial hearing loss. The physiotherapist advised facial exercises. Four weeks after the initial treatment, the patients was again referred to dental department for the management of the necrotic mandibular jaw.

Intra-orally, the necrotic bone was removed surgically under local anaesthesia and the curetted bone was sent for histopathological examination. The stained section revealed multiple irregular devitalized bony trabeculae devoid of any osteoblast, surrounded by hemorrhagic connective tissue stroma, comprising of spindle shaped fibroblast and mixed inflammatory infiltrate. The overall histopathological features were suggestive of chronic non-suppurative osteomyelitis. Herpes zoster should be diagnosed and treated at the earliest to prevent its associated complication and should be followed up for at least six months. If osteomyelitis is present, then antibiotics and antiviral therapy with aggressive debridement of necrotic bone can provide adequate wound and bone healing.

REFERENCES


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Received: June 14, 2017; Accepted: October 29, 2017.

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Figure 1: Exposed bone seen in mandibular jaw extending from 31 to 35 region. H&E stained photomicrograph exhibiting necrosed bony trabecular devoid of osteocytes and fibrous inflamed tissue in marrow spaces.

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