

## NECRO-DESTRUCTIVE HERPES ZOSTER

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A 40-year-old male patient had herpes zoster involving ophthalmic and maxillary divisions of the right trigeminal nerve which resulted in destruction of alveolar processes of maxillary bone, falling of teeth and forming of the oro-antral fistula.

**Key words :** Herpes zoster, Oro-antral fistula, Necro-destruction.

Herpes zoster is a self-limiting condition in majority of the cases. A few complications like encephalomyelitis, meningitis, pneumonitis and post-herpetic neuralgia have been reported. In ophthalmic herpes zoster, ocular complications like superficial and deep keratitis occur in 50% cases, but iritis is uncommon. Extension of the infection to involve motor nerve may cause facial palsies in 7% of cases and ocular palsies in 13%.<sup>1</sup>

In the following case report both ophthalmic and maxillary branches of the right trigeminal nerve were involved with destructive and ulcerative lesions of the skin, upper gums, fall of teeth and formation of oro-antral fistula.

### Case Report

A 40-year-old male suffering from cardiomyopathy and congestive cardiac failure developed severe tooth-ache followed by pain and burning sensation in the right central part of the face. Within 24 hours, localised vesiculo-bullous eruptions appeared on the forehead, cheek, ala of nose, upper lip and upper gum on the right side. One day later, ulcerations developed at the base of canine, and first and second premolar teeth on the right side, resulting in loosening of these teeth. The patient had pain and discomfort in masticating the food. Frothing, excess of salivation with foul odour were other dominant complaints. Oro-dental examination showed acute gingivitis, peri-odontitis. One

week later, first and second premolars fell off and a week later right canine tooth also fell out. ENT examination revealed an oroantral fistula through which a probe could be easily passed. Eye examination was normal. Systemic examination revealed features of cardiac failure.

Routine examination of blood was within normal limits and urine showed traces of albumin and a few amorphous crystals. Immunoprofile showed IgG above 4000 mg%, IgA 252 mg% and IgM 226 mg%. X-ray of maxillary sinuses showed oro-antral fistula. X-ray chest showed cardiomegaly. Electro-cardiogram showed lateral wall ischaemia and borderline LVH. Repeated swabs from maxillary sinus were sterile.

### Comments

In our case the area supplied by the right anterior-superior alveolar nerves which are branches of the maxillary division of the trigeminal nerve showed deep ulcerations on the skin and gingiva, and necrosis of the peri-odontal ligament. Peri-odontal ligament forms the most important part of gomphosis joint between teeth and socket bones. Being the most peripheral and richly supplied area with nerves,<sup>2</sup> brunt of the disease would have been here, which resulted in loosening and falling off of the teeth. The floor of the maxillary sinus is formed by the alveolar processes forming several conical elevations corresponding with the roots of the first and second premolar teeth.<sup>3</sup> Occasionally, root of the upper canine which is largest of all the human

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teeth,<sup>4</sup> also projects into the maxillary sinus. We presume that the above-mentioned teeth in our case were projecting into the maxillary sinus, thus falling off of these teeth and necrosis of the peri-odontal ligament would result into oro-antral fistula secondarily.

Detailed review of the literature, revealed only one report<sup>5</sup> of a similar complication of herpes zoster.

### References

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