

Herpes zoster of the trigeminal nerve: A case report

Case Report

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ABSTRACT

Introduction: Shingles is a common disease of the elderly. Presenting as metamereric eruptions and possibly affecting the orofacial sphere, its semiology must be mastered by the dental physician, as the diagnosis is essentially clinical.

Clinical observation: This is a 75-year-old patient with no previous history who had previously consulted dentists for painful, crusty, left-sided skin eruptions on the hemiface. These were associated with erosions in the left labial area and the tongue. These lesions appeared to follow the course of the third branch of the trigeminal nerve. Given this picture, the diagnosis of herpes zoster was accepted and the patient was put on Aciclovir® 200 mg 5 times a day, combined with detersions sessions, strict hygiene and dietary rules and sun avoidance. The patient subsequently showed a good clinical course.

Discussion: Because of its nerve tropism, herpes zoster is a viral disease that can take on several appearances depending on the nerve affected, thus confusing the practitioner. When faced with any diagnostic hypothesis, the practitioner should note the unilateral nature and clinical appearance of lesions in a context of advanced age or debility, or suspect the latter.

Conclusion: Shingles is a rare disease, but it is sufficiently characteristic to be recognized and diagnosed by the practitioner. The practitioner must keep in mind the master signs of this pathology to avoid falling into possible diagnostic traps.

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SUMMARY:

Shingles is caused by the varicella-zoster virus (VZV). This disease is frequently evoked in front of a picture of immunodepression or advanced age. Its characteristic vesiculo-crusty aspect and the unilaterality of the lesions with notion of terrain are the key points necessary for the diagnosis. Even if the involvement of the third trigeminal branch remains rare, its singular clinical expression must be known by the oral practitioner. The highlighting of this particular semiology will be emphasized in this clinical case.

INTRODUCTION:

VZV is a highly contagious virus whose transmission is mainly by direct contact with skin lesions of subjects with chickenpox or herpes zoster. Airborne transmission is possible during the incubation of chickenpox. Most adults have antibodies to the virus because they had chickenpox in childhood or were vaccinated. However, people who have had chickenpox can develop Shingles years later, since the virus remains present for life, but in a latent form, and this condition is unique to humans. Herpes zoster has an affinity for nerve tracts and is also expressed by

particularly painful skin or mucosal rashes [6].

Observation:

This is a 61-year-old patient who came to the clinic with pain associated with rashes located on the tongue that had been evolving for a week. The patient presented with a 6 years history of pulmonary lobectomy following a benign tumor process and chronic osteoarthritis undergoing non-steroidal anti-inflammatory treatment (Diclofenac 75 mg) for 2 years.

The exobuccal clinical examination revealed vesicular lesions organized in clusters associated with crusts on a diffuse erythematous background located in the right labial and chin region (Fig 1) causing burning pain and photosensitivity. Endobuccal examination revealed ulcerations ipsilateral to the exobuccal lesions covered by a fibrinous coating located on the dorsal and ventral surface of the tongue (Fig 2, 3) and delimited by the lingual septum laterally while extending posteriorly beyond the lingual V as far as the palatine tonsil on an erythematous background of the hemi-wedge of the palate (Fig 4). These ulcerations were the cause of dysgeusia and dysphagia.



Figure 1: Clustered vesiculo-crusty lesions in the left labiomental area.



Figure 2: Unilateral ulcerations on the dorsal surface of the tongue



Figure 3: Vesicular lesions on an erythematous background on the ventral side of the right tongue



Figure 4: Ulcerations at the level of the veil pillar and the right tonsil

Feeding was also the cause of the pain. In view of this clinical picture, the diagnosis of trigeminal herpes zoster of the mandibular branch (V3) associated localization on the pharyngeal plexus of the cranial nerve X (Palatopharyngeus muscle). In view of this clinical picture, the patient was put on Aciclovir 1000 mg twice a day associated with an analgesic of the Paracetamol type 1g three times a day, and a strict control of the diet (Neutral diet) with sun avoidance.

Mouthwash with salt water was also recommended. A complete blood test was also requested, which came back without any particularity. The patient was subsequently checked at day 7 with a good clinical evolution and regression of lesions and pain. At D+15 the exobuccal lesions had disappeared with scarring (Fig 5). Endobuccally, the healing of the lingual mucosa was considered sufficient (Fig 6) with disappearance of the erythematous background at the velar level (Fig 7). A restoration of the oral cavity was then instituted with removal of all infectious foci. An evaluation of the taste function was also made with a complete recovery from the 12th day.



Figure 5: Improvement in general condition and regression of lesions exobuccally at day.



Figure 6: Disappearance of the ulceration with healing of the lingual mucosa.



Figure 7: Good clinical evolution with regression of the soft palate erythema and lesion

DISCUSSION:

Herpes zoster is a neurotropic ectodermatosis of the septoneuritis type with tropism directed to sensory neurons [7] with lesions located on the skin, mucosa, and nervous tissue following a well-defined dermatome [3].

increases with age and is highest over 75 years The incidence of herpes zoster old, with a rate of 1.4/100persons/year. The frequency of pain persisting for more than one month after the onset of shingles increases with age. Subjects aged 50 years and over have a 15-fold higher prevalence of post-herpetic neuralgia at 30 days and 27-fold higher at 60 days than subjects under 50 years of age [1].

Herpes zoster corresponds to the reactivation of the varicella virus (VZV) which has remained quiescent in the nervous system of a previously immunocompetent subject. Like other herpesviruses,

VZV is produced following the well-coded expression of its genes. It is the complete or partial interruption of this regulated cycle of virus gene expression that results in latency. Re-establishment of the coordinated sequence of gene expression results in reactivation [6].

In the skin, herpes zoster is characterized by vesicles with clear and then cloudy content, sometimes hemorrhagic with crusts on erythematous plaques that disappear after 7 to 10 days [4,5]. Nerve involvement includes elective involvement of the sensory neuron with associated sympathetic lesions. Erythematous macules appear on a background of influenza-like syndrome associated with local pain. They are progressively elevated and sometimes form a clump separated by

healthy skin. In a few hours, these macules progressively become papular and gradually fill with fluid; this is the vesicular transformation. This vesicle is desiccated after the 4th day and gives way to crusts after 8 to 12 days. At the mucosal level, the vesicles rupture more rapidly and give way to pseudomembranes. Neurologically, the pain is classic pre- or post-eruptive "sacral fire" with hyperesthesia followed by hypo- or anesthesia. At the oral level, ageusia is sometimes reported in pharyngeal shingles. Cases of paralysis are also encountered, such as facial, velar, pharyngeal and laryngeal paralysis, with a more or less rapid remission [4]. The treatment of herpes zoster is based on antiviral drugs for a minimum period of 5 days, as in our case, mainly aciclovir [2,3]. It is preferable to administer this treatment within 3 days of the appearance of the vesicles. In this case, the diagnosis was facilitated by the characteristic appearance of the lesion, its unilateral nature and the subjective signs reported by the patient. The relatively rare involvement of the third branch of the trigeminal nerve, especially in the mouth, should not exclude this diagnostic possibility. Treatment must be initiated rapidly in order to avoid the onset of particularly disabling pain symptoms that are resistant to analgesics administered alone.

CONCLUSION

The dental physician can play a key role in the diagnosis of uncommon forms of herpes zoster. The different criteria evoked as to the diagnosis must sound the alarm particularly in subjects predisposed by senescence or immunodepression.

CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

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