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Ophthalmic Zoster, A Rare Pathology in a Child

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ABSTRACT

Herpes zoster in children is rare and particularly the ophthalmic form, which can be responsible for serious ocular complications. We report the case of a 6-year-old female patient with herpes zoster ophthalmicus. The patient was 6 years old and hospitalised with a painful rash. The examination revealed an infectious syndrome, a painful vesicular rash, in a cluster, resting on an erythematous background located on the forehead and the root of the nose with eyelid edema. Slit lamp examination came back normal. The diagnosis of herpes zoster ophthalmicus was made on the basis of clinical findings. The course was favourable on acyclovir with no ocular complications and no post-herpetic pain.

Keywords

Herpes zoster ophthalmicus, Child, VZV, Trigeminal.

Introduction

Herpes zoster (shingles) is a disease resulting from the reactivation of the varicella zoster virus (VZV), which has remained latent in Gasser's ganglion following primary varicella infection [1]. Herpes zoster in children is rare, particularly the ophthalmic form, which can cause serious ocular complications requiring early and appropriate management [2,3]. Few cases have been described in the world and especially in black Africa. We report the case of a 6-year-old patient with no previous history of chickenpox.

Observation

A 6-year-old girl with no previous history of chickenpox was presented with a painful rash on the forehead and hemiface that had been evolving for 5 days. Clinical examination revealed a fever of 39°C, tachycardia at 123bpm, good nutritional status with a BMI= 14 (between -1DS and the median), multiple vesicles grouped in clusters on the forehead, the root of the nose resting on an erythematous background with oedema of the upper and lower right eyelids (Figures 1 and 2).

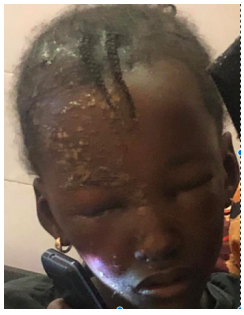

Figure 1: Vesicles grouped in clusters.

Figure 2: Vesicles resting on an erythematous background.

The ophthalmological examination with a slit lamp was normal. The diagnosis of herpes zoster ophthalmicus was made on the basis of the very characteristic clinical signs. The white blood cell count was 11,000 and the C-reactive protein was negative. The retroviral serology was negative in the search for a particular terrain. The patient was put on acyclovir per os 20mg/kg/D. The evolution was favourable under treatment with regression of the cutaneous signs and stable apyrexia.

Discussion

Ophthalmic herpes zoster is a particular localization because of its clinical presentation, its ocular and algesic complications remain potentially serious. It accounts for 10 to 30% of cases of herpes zoster [4,5]. In children, it is rare and has a better prognosis [6]. It is a potentially severe infection secondary to latent reactivation of VZV located in the trigeminal ganglion of Gasser, which migrates along the ophthalmic nerve, V1 branch of the trigeminal nerve [7,8]. Reactivation of the virus occurs when the immune system is compromised. Age, immunosuppression and trauma are well established risk factors [4]. These predisposing factors were not found in our patient who had a good nutritional status and a negative retro viral serology. Ophthalmic herpes zoster is due to damage to the ophthalmic division of the V, which has three branches: frontal, lacrimal and nasociliary [9].

In 70% of cases, it begins with unilateral superficial pain in the trigeminal dermatome with burning and stabbing pain [4]. These pains were found in our patient three days before the appearance of a vesicular eruption spread over the entire territory of the V1 branch of the trigeminal nerve. Some cases of herpes zoster ophthalmicus manifest as isolated ocular involvement without prior skin rash (zoster sine herpete) [10,11]. In our patient the slit lamp examination came back normal. The most common ocular disorders are keratitis, iritis and optic neuritis, but all structures of the eye can be affected. Involvement of the nasociliary branch, known as Hutchinson's sign, is considered to be a precursor to skin involvement of the nasal tip [12].

The course is usually benign within eight days, but ocular involvement may lead to loss of vision. In a paediatric series of ten cases of herpes zoster ophthalmicus, two had visual deficits and nine had corneal sensitivity disorders [3,9]. The evolution of our patient was favourable with regression of the infectious syndrome and the rash within one week of treatment. The prognosis was excellent. The most frequent complications were secondary bacterial superinfection, depigmentation and scarring, while other complications such as encephalitis, ventriculitis, sclerokeratitis and anterior uveitis were less frequent [8]. Oculomotor paralysis and optic neuropathy are not exceptional [13].

Conclusion

Herpes zoster in children is rare and particularly the ophthalmic form, which can be responsible for serious ocular complications. Prompt clinical diagnosis allows timely initiation of acyclovir treatment to prevent vision-threatening sequelae.

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