Herpes Zoster Ophtalmicus in an Immunocompetent Child as Primary Presentation

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Abstract

Aim & Purpose: To report a new case of herpes zoster in an immunocompetent pediatric patient.

Case report: A previously healthy 6-year-old boy which the medical history revealed no anterior vaccination against VZV but a maternal varicella during the pregnancy. He Consults on our Emergency Department for a diffuse vesicular skin eruption, particularly covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache.

The peculiarity of our observation is the occurrence of shingles in an immunocompetent child, without notion of previous chickenpox and the ophthalmic localization which remains a rare form in children. Clinicians must be vigilant in their evaluation of vesicular lesions in children even without known varicella exposure.

Keywords: Herpes zoster ophtalmicus • Child • Varicella • Primary presentation

Introduction

Herpes zoster ophtalmicus in children is uncommon and is only barely described in the literature especially in immunosuppressed patients [1]. It is quite uncommon in immunocompetent children [2]. This is a rare affection which can be responsible for serious ocular complications requiring adequate and early management [3]. We are reporting a new case of herpes zoster in an immunocompetent pediatric patient.

Case Report

A previously healthy 6-year-old boy, witch the medical history revealed no anterior vaccination against VZV but a maternal varicella during the pregnancy. He Consults on our Emergency Department for a diffuse vesicular skin eruption, particularly covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache. The clinical examination revealed a sub-febrile temperature (38.5°C), a thick layer of necrotizing crusts covering the left forehead, a blurry vision, photophobia and a left-sided Headache.

Discussion

Herpes zoster is very unusual in children younger than 10 years old, especially in healthy children [4]. In an Indian study about 195 cases of HZV, 22 ophthalmic shingles were found, 10% were children [5]. Varicella-zoster virus is 1 of 8 viruses in the Herpes viridae family known to infect humans. It is known to cause 2 distinct disease states: varicella due to a primary infection from the virus, and herpes zoster caused by a reactivation of the latent virus in the dorsal root ganglion, which the travels the neural pathway and manifests cutaneous along 1 to 2 dermatomes [6]. The overall incidence of Herpes-zoster is lower in children compared to adults, and the risk dramatically increases in individuals older than 50 years [2]. Children aged 1 to 18 years who were evaluated for herpes zoster demonstrated a deceased incidence among those who were vaccinated versus those who were not [7,8]. The vaccination strain of the virus probably has led to the presentation of herpes zoster, but theoretically it is also possible that wild type VZV from a
fluorescent antibody testing and viral culture are less rapid but are standard
zoster usually is diagnosed based on its clinical presentation [2]. Direct
but not limited to disseminated Herpes zoster, herpes zoster ophthalmicus
severe sequelae secondary to zoster infection in pediatric patients, including
of cases, with an often-poor prognosis [14]. There are documented cases of
commonly occur by 7 to 10 [13]. Ocular complications occur in 50% to 70%
of childhood; however, the development of herpes zoster after vaccination has been reported [9-12].

The typical presentation of HZ includes grouped vesicles or small bullae on
an erythematous base that occur unilaterally within the distribution of a cranial
or spinal sensory nerve, occasionally with overlap into the dermatomes above
and below, typically without crossing the midline [13]. The lesions may become hemorrhagic, necrotic, or bullous, with or without adenopathy. Rarely, there
can be pain without the associated skin eruption (zoster sine herpete). Lesions
tend to crust by days 7 to 10 [13]. Ocular complications occur in 50% to 70% of
cases, with an often-poor prognosis [14]. There are documented cases of
severe sequelae secondary to zoster infection in pediatric patients, including
but not limited to disseminated Herpes zoster, herpes zoster ophthalmicus [15,16] Ramsey Hunt syndrome [13] and chronic encephalitis [13]. Herpes
zoster usually is diagnosed based on its clinical presentation [2]. Direct
fluorescent antibody testing and viral culture are less rapid but are standard
tests that may help with the diagnosis. Direct fluorescent antibody testing can
have a high false-negative rate, and viral cultures typically take 2 weeks for
completion. These tests have largely been replaced by PCR analysis [2].

Conclusion

The peculiarity of our observation is the occurrence of shingles in an
immunocompetent child, without notion of previous chickenpox and the
ophthalmic localization which remains a rare form in children. Clinicians must
be vigilant in their evaluation of vesicular lesions in children even without
known varicella exposure.

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