Herpes Zoster In A Healthy Nigerian Child: A Case Report

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Abstract

Herpes zoster is an uncommon infection in children and when present, it's an infection commonly seen in children who are immunocompromised and rarely seen in healthy children. I present a case of a healthy Nigerian child with herpes zoster infection in order to raise the index of suspicion amongst the medical community for early diagnosis and intervention when necessary.

INTRODUCTION

Herpes zoster infection is a viral illness characterized by vesicular lesions clustered along one and rarely two dermatomes [1] .It is regarded as a secondary varicella zoster virus infection commonly seen in adults and the elderly [2,3] . It is a disease that is preceded by previous exposure to varicella infection, which develops as result of reactivation of the dormant virus in the dorsal root ganglion [4,5] , particularly in those whose immunity have been compromised. Though, a disease commonly seen in adult and infrequently in children, its incidence is believed to be on the increase amongst children [6] . This case is reported in order to sensitize the health community to have a high index of suspicion for the disease amongst children, and for timely diagnosis and treatment where applicable.

Patient S.B is a 13 year old Nigerian girl who had just been brought from the village to assist her guardian who is a nursing mother. She presented at the general paediatric outpatient clinic with vesicular and bullous eruptions on the chest and the back which was noticed six days prior to presentation. The lesion which started as a small papule was said to have progressively increased in number and size. There was a preceding history of pain over the area of the lesion which was mitigated with administration of acetaminophen. The girl and her guardian were unsure of any prior history of varicella infection in the past and there was no history of varicella vaccination. On examination, a healthy looking girl who weighed 40kg was seen. She was afebrile (36.5 c), anicteric , not pale. Chest examination revealed numerous papular, vesicular, and bullous rashes in crops along the thoracic dermatome(figure 1) at various stages of development which also extended to the back. Auscultatory findings and other system examination were essentially normal. An assessment of herpes zoster was made. Retroviral screening was negative for HIV 1 and 2, total White blood cells was 13,300/mm3, Neutrophil was 74% and lymphocyte was 26%. On the basis of this clinical diagnosis the patient and guardian were counseled and reassured and advised to keep the infant away from the patient. On the 10 th day following first consultation, the lesion had formed scabs and some were healed (figure 2). There was no new lesion seen. Unfortunately, the infant had become infected with varicella zoster virus manifesting as chicken pox by the third week of patients illness.

Figure 1

Figure 1: Herpes zoster lesion along the thoracic dermatome seen on the 6 day of the development of lesion

Figure 2

Figure 2: Healed lesion of herpes zoster seen on the 3 week of the illness

DISCUSSION

Herpes zoster infection is a viral disease caused by varicella zoster virus [1] . It usually follows a varicella infection following a reactivation of the dormant virus in the dorsal root of the ganglion [1] . It is a disease commonly seen in adults particularly those who are immunocompromised and are rare in children. In children, the disease is commonly seen in patients who are immunocompromised and rarely seen in healthy children.

Most affected adults usually present with the characteristic lesions in the dermatomes. It may affect one or two dermatomes [1] . Affectation of the thoracic dermatome is not a common presentation in children as oppose to cervical or sacral dermatomes which are more common [7] . On the contrary the index case had affectation of the thoracic dermatome as it is commonly seen in adults.

The disease is known to follow previous varicella infection and rarely vaccination [1,7] . The incidence of herpes zoster among vaccine recipients is reported to be about 14 cases per 100,000 person-years [7] . In this case the patient and guardian were unsure of a previous varicella infection. There was no previous vaccination in the patient as corroborated by the patient and guardian in the history of her illness. Also, the vaccine for varicella zoster virus was not available in Nigeria until recently (2006) and it is only available in few private hospitals in the big cities.

At presentation retroviral screening was done to rule out a possible immunodeficiency as herpes zoster is known to be associated with aids [1] . There was no history to suggest a compromise of her immune status. The diagnosis of the disease was clinical [7] as there were no facilities to do viral studies. Herpes simplex was entertained as a differential diagnosis since the disease manifest with vesicles but this was ruled out on the basis of the lesion seen along the dermatome and in view of clinical course of the illness in the child which are characteristics of herpes zoster infection.

In conclusion, there is the need for medical practitioners to have a high index of suspicion for the disease and to institute appropriate treatment particularly where it threatens the life of the child. More importantly the government should be encouraged to make the vaccine available and accessible to children of all ages in the country.

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