

Case report: Herpes zoster in a healthy 5 month old infant

Olgu sunumu: Sağlıklı 5 aylık bebekte herpes zoster

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SUMMARY

Varicella zoster virüs (VZV) is a common viral infectious agent that causes chickenpox in childhood. Herpes zoster (HZ) is a latent infection that is caused by VZV, which is localized in the cells of dorsal root ganglions. Although the disease is commonly seen among elderly people and immunosuppressive individuals, it is rarely observed in healthy children. In our case report we present a 5-months aged patient without any immunosuppressive disease or undergoing varicella disease who was diagnosed as Herpes Zoster.

Keywords: Herpes zoster, healthy children, infant

ÖZET

Varisella zoster virüsü (VZV) çocuklarda suçiçeğine sebep olan sık görülen bir viral enfeksiyon ajanıdır. Herpes zoster (HZ), arka kök ganglion hücrelerine yerleşen VZV tarafından oluşturulan latent enfeksiyondur. Hastalık, yaşlı ve immünsüpresif kişiler arasında sık görülmesine rağmen, sağlıklı çocuklarda nadiren gözlenir. Bu vakada 5 aylık, immunsüpresif bir hastalığı olmayan ve daha önce suçiçeği geçirmediği bildirilen herpes zoster tanısı koyduğumuz bir hasta sunulmuştur.

Anahtar sözcükler: Herpes zoster, sağlıklı çocuk, infant.

INTRODUCTION

Herpes zoster (HZ) is a disease which holds a single sensory nerve or its dermatome with the effect of latent varicella virus (VZV) settled into dorsal root ganglion, old age, immunosuppression and unknown various triggering factors. For 2% of the patients subjected to intrauterine VZV, chickenpox is transmitted subclinically and they have a risk to develop HZ infection after birth¹⁻². Although it is a common disease in older ages, it is rare to be under 1 years old. In this paper, we present 5 month old baby with HZ as a case.

CASE REPORT

5 month old baby girl was taken to our

clinic with the complaint of bulging full of water in the body. Her family said the baby was restless and had a mild fever for 3 days. Systemic examination of the baby was normal while plaques on which there were a large number of vesicles were present on the region starting from abdomen and extending to lumbar region and the region matching to thoracic 8-9 dermatomes, erythematous base, on dermatological examination (Figure 1, 2). Routine laboratory studies were normal.

Tzanck smears taken from patients were evaluated under the microscope and multinucleated giant cells were detected. As a result of physical examination and Tzanck smear, the patient was diagnosed with HZ. Treatment with systemic acyclovir syrup

and topical fusidic acid cream was started. Lesions were markedly reduced after 5 days.

DISCUSSION

Varicella zoster virus is an enveloped and double-stranded DNA virus belonging to the human herpes virus family. After passing the primary varicella infection, the virus remains latent through settling in the dorsal root ganglia of the sensory nerve. Herpes zoster disease occurs as a result of reactivation of the virus due to various reasons³⁻⁴. Chickenpox is seen frequently in children of 5-9 years while HZ is usually seen in people over 50 years old. Incidence in children aged zero to 14 years is 0.45/1000, while it is 4.2-4.5/1000 for over 75 years. The majority of cases having HZ in childhood is 5 years old and older⁵. Our case was 5 months old baby.

Typical involvement regions were reported as thoracic (53%), cervical (20%), ophthalmic (15%) and lumbosacral (11%)³. Thoracic dermatome involvement is present in our patient. Clinically, HZ begins as erythematous and painful, then vesicles occur on. After 1 week, vesicles are scabbed and get better with ulcerated areas. Similar clinical onset was present in our case. HZ cases were also reported after varicella vaccination⁶. If no history of varicella in children, intrauterine varicella infection should be considered in HZ babies. HZ is seen in the first 12 months (2-40 month range) on the babies exposed to intrauterine varicella. Congenital varicella syndrome may occur in the babies exposed to varicella before 20 weeks of pregnancy⁷⁻⁸. Our patient had no history of vaccination and the mother was thought to be infected during pregnancy because it was a nurse. However, there were no signs of congenital varicella syndrome in physical examination.

The diagnosis of HZ in babies is based on anamnesis, physical examination and laboratory investigations. The diagnosis was made by physical examination and Tzanck test in our patient. Serological tests were not performed. The differential diagnosis of HZ should be done with herpes simplex infection, contact dermatitis, erythema

multiforme, cellulitis and impetigo²⁻⁹. It was separated from other diseases with the presence of dermatomal involvement, lack of contact anamnesis in our patient and Tzanck test.

In healthy children, HZ usually is recovered within 1-3 weeks without complication and antiviral treatment is not needed very much. Only supportive treatment can be given. However, antiviral treatment is recommended in association with cranial nerve involvement, pain in the acute phase, congenital or acquired immunodeficiency syndrome and atopic dermatitis¹⁻⁹. Systemic acyclovir therapy was given since there was discomfort and early start in our patient. Although HZ seen in babies is self-limiting disease, you need to be careful since it can be seen in malignancy and immunosuppressive conditions²⁻⁹.



Figure 1: Generalized grouped vesicles on dermatomally located erythematous base in the abdomen of the case.



Figure 2: Appearance of lumbar region of the case.

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