HUMAN HERPESVIRUS 6 PRIMARY INFECTION - IS THAT SIMPLE?

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INTRODUCTION

Primary infection with human herpesvirus 6 (HHV-6) may result in a spectrum of clinical disease, ranging from asymptomatic infection to acute febrile illnesses with roseola.

Rarely HHV-6 primary infection can manifest as encephalopathy or encephalitis. The pathophysiology is not clear, they need to be early diagnosed and treated in order to avoid potentially serious damage.

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CASE PRESENTATION SUMMARY

- A 7-month-old male presented with an arrest of ongoing activity with altered awareness, a blank empty stare and eye deviation.
- The child's temperature was normal, his physical exam was unremarkable.
- CSF examination revealed 1 WBC/mm³, glucose 62 mg/dl and protein 58 mg/dl.
- The patient was started on empiric acyclovir, as acute encephalitis was suspected.
- Next day **febrile fever, repetitive myoclonic seizures and maculopapular rash** on his face and trunk appeared.
- In few days left-sided hemiparesis developed.
- MRI on the 7th day of the disease was normal.
- Ceftriaxone and antiepileptic therapy was prescribed.

- All results, including immunological and virological tests by PCR in blood and CSF, were negative.
- In CSF on the 8th day of disease HHV-6 DNA by qualitative PCR was negative whereas the blood sample examined for PCR HHV-6 was positive.
- The EEG on the 13th day of the disease revealed interhemispheric asymmetry.
- The patient received immunoglobulin (2g/kg) and intravenous ganciclovir (5mg/kg twice daily for 14 days), resulting in a slight improvement of the clinical condition.
- Nevertheless, 7 months later, he still had left-sided hemiparesis and partial seizures.

HHV-6
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Hemipare
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DISCUSSION

Children with suspected viral encephalitis should be investigated for HHV-6. Occasionally, HHV-6 is not detected in the CSF of the patients with HHV-6 CNS disease. The lack or low level of viral DNA in the CSF samples suggests that direct invasion of the central nervous system by HHV-6 probably is not the main cause of encephalopathy/encephalitis.

REFERENCES

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