

Bilateral Facial Palsy Associated with Epstein-Barr Viral Infection

Background:

- Bilateral facial palsy is a rare clinical entity accounting for 0.3-2% of all facial palsies in the US [1, 2].
- Acquired causes include Lyme disease, Guillain-Barré syndrome, leukemia, infectious mononucleosis, trauma, sarcoidosis, metabolic, neurologic and autoimmune.
- Facial palsies have a broad differential and present a diagnostic dilemma.

Case Description:

- 23-year-old male presented with a 4-day history of severe, diffuse myalgias, malaise, photophobia with progressively worsening bilateral facial palsy and slurring of speech.
- Vitals were within normal limits.
- He was empirically started on oral doxycycline, prednisone, and valacyclovir.
- Laboratory results were notable for atypical lymphocytes on a peripheral smear.
- VDRL, Cryptococcal Ag, Lyme, HIV, CMV, VZV PCR returned negative
- Cerebrospinal fluid studies showed elevated WBCs with scattered lymphocytes and monocytes and an elevated protein level.
- Mononucleosis spot test was positive.
- EBV viral capsid antigen (VCA) IgM and IgG were positive.
- EBV nuclear antigen (EBNA) was negative.

Bilateral facial palsy is a rare clinical entity. EBV infection comprises 0.5-7.5% of facial palsies, with the majority being unilateral. Only a few cases of bilateral facial paralysis as a manifestation of EBV have been reported.

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Discussion:

- EBV infection comprises 0.5-7.5% of peripheral facial palsies [3, 4].
- Majority of facial palsies are unilateral.
- Only a few cases of bilateral facial paralysis have been reported as a manifestation of EBV.
- This patient had serological evidence of recent EBV infection, although EBV PCR was negative in the CSF.
- Presence of atypical lymphocytes on peripheral smear, lymphocytic pleocytosis of CSF and positive VCA IgM and IgG antibodies.
- Positive EBV VCA IgM and EBV VCA IgG without EBNA is indicative of an acute infection.

Conclusion:

- This case illustrates the importance of a thorough diagnostic approach to facial palsies to rule out other potentially life-threatening and/or treatable etiologies.

References

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