Acute hemiplegia as a rare presentation of infantile Guillain-Barre syndrome

To the Editor

I have read with interest the case report by Muthaffar et al[1] on acute hemiplegia (AH) as a rare presentation of infantile Guillain-Barre syndrome (GBS). Muthaffar et al[1] did well in ruling out hemorrhagic, or ischemic neurovascular insult, trauma, neurometabolic disorders, botulism, various viral (poliovirus, Epstein-Barr virus, cytomegalovirus, herpes simplex virus, varicella zoster virus) and bacterial (*Campylobacter jejuni*, *Mycoplasma pneumonia*) infections, and Hopkins syndrome that could explain AH in their studied infant. It is obvious that human immunodeficiency virus (HIV)-associated polyneuropathy has become the most common neurological complication of HIV infection, and is one of the main risk factors for the development of a neuropathy worldwide. Therefore, HIV infection should always be considered as an underlying cause in patients with neuropathy.[2] As an acute inflammatory demyelinating neuropathy, GBS might be the initial manifestation of HIV infection.[3] Based on previous reports, HIV-associated GBS were noticed to typically occur early in HIV infection, even at seroconversion, prior to the development of acquired immunodeficiency syndrome (AIDS).[2,4] In the Kingdom of Saudi Arabia (KSA), whilst the numbers of reported HIV cases have stabilized since 2006, HIV/AIDS remains an important public health problem.[5] Although no studies on the exact prevalence of pediatric HIV/AIDS are yet present in KSA, the rate of mother-to-infant transmission of HIV type 1 has been reported to be high (63.5%).[6] I presume that Muthaffar et al[1] did not consider the HIV status of the mother, and hence, the potential mother-to-infant transmission of HIV. Accordingly, HIV-associated GBS was solicited to be excluded in their studied infant through the diagnostic panel of HIV viral load, and CD4+ T-lymphocyte count estimation. In spite of that limitation, AH as a clinical presentation of GBS could be confidently added to the category of atypical presentation of pediatric GBS which constitutes 11.2-24.3% of the whole pediatric GBS presentation reported previously.[7,8]

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Reply from the Author

We thank Prof. Al- Mendalawi for his constructive review and input regarding our case report.

As he mentioned, HIV-associated polyneuropathy/GBS is one of the possible etiologies of AH at any age. It is prudent to consider HIV-associated polyneuropathy/GBS in specific case scenarios, for example, in communities with high prevalence of HIV, which is not the case in KSA.

The infant mentioned in our case report was clinically otherwise healthy after the acute presentation (that is, no history of HIV constitutional symptoms like failure to thrive, inter-current infections, lymphadenopathies, and so forth), and has no history of blood transfusion. It is also routine to carry out HIV testing as part of the antenatal screening according to the American College of Obstetricians and Gynecologist (ACOG) recommendations, and HIV testing of the mother was negative in our case.

Based on the above, HIV neuropathy was not one of the main possibilities in that context. However, HIV infection should be always considered in the differential diagnosis of neuropathy and hemiplegia at any age.

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