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Nerve Transfers in Acute Flaccid Myelitis: A Beacon of Hope

To the Editor:

We read with great interest the study by Saltzman et al.[1] on nerve transfers for acute flaccid myelitis (AFM). AFM is characterized by acute flaccid paralysis with focal or asymmetric limb weakness and characteristic spinal gray matter lesions on imaging. Besides poliomyelitis, an array of viruses may be causative. These include non-polio enteroviruses (enterovirus D-68 and A-71, Coxsackie A and B), arboviruses (West Nile virus, Japanese B encephalitis virus), herpes viruses (herpes simplex virus 1 and 2, varicella zoster virus, Epstein-Barr virus), and so forth. AFM usually has a poor prognosis and is associated with persistent motor deficits.[2] We applaud Nelson et al. for using an innovative treatment in these patients with remarkable improvement, providing a glimmer of hope.

We wish to share our experience with AFM in 10 children (six boys; age group eight to 12 years) who presented clustering over a period of three months (monsoon of 2017). All children had a prodromal febrile illness with a cough and coryza followed five to seven days later by patchy flaccid paralysis (isolated lower limb, upper limb, or both) and corresponding patchy involvement of spinal cord gray matter. All these children were investigated for polio, herpes simplex virus 1 and 2, enteroviruses, and Japanese B encephalitis virus. However, etiologic evaluation was noncontributory. Despite therapy with intravenous immunoglobulin, corticosteroids or plasma exchange, and austere rehabilitative measures, none of them experienced significant improvement. All had persistent motor deficits after 18 months.

With the eradication of polio, attention needs to be drawn to the rise of non-polio acute flaccid paralysis. AFM outbreaks have been reported in the USA and Canada as well as in Europe and Asia.[3] All of these cohorts had a poor prognosis with persistent weakness at follow-up. The study by Saltzman et al. has given a new insight into the management of these patients and we are also planning to pursue this in our cohort.

References

1. Saltzman EB, Rancy SK, Sneag DB, Feinberg JH, Lange DJ, Wolfe SW. Nerve transfers for enterovirus D68-associated acute flaccid myelitis: a case series. Pediatr Neurol. 2018;88:25–30.
2. Nelson GR, Bonkowsky JL, Doll E, et al. Recognition and management of acute flaccid myelitis in children. Pediatr Neurol. 2016;55:17–21.
3. Sarmast SN, Gowda VK, Ahmed M, Basvaraja GV, Saini J, Benakappa A. Acute flaccid myelitis—clustering of polio-like illness in the tertiary care centre in Southern India [e-pub ahead of print]. J Trop Pediatr. 2018. https://doi.org/10.1093/tropej/fmy052.

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