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Poor clinico-radiological correlation: A hallmark of acute flaccid myelitis

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Dear Sir,

We read with great interest the article by Okumura et. al. on MRI findings of acute flaccid myelitis (AFM) during an outbreak of enterovirusD68 (EVD68) infection in Japan [1]. Authors have described the sequential imaging findings in a cluster of EVD68 related AFM. They have highlighted the poor clinico-radiological correlation and ill-defined diffuse spinal involvement during the acute phase. They have rightly pointed that the reversible vasogenic edema might be contributory.

We would like to share our experience with imaging findings in acute flaccid myelitis [2]. Our cohort also had a patchy non-contiguous clinical involvement despite diffuse radiological involvement, although the underlying viral etiology was not clear. Hence, these finding might not be specific to EVD68 related myelitis and may be seen in viral AFM in general.

Differentiating AFM from transverse myelitis secondary to demyelination may be difficult at initial presentation. Although both these disorders have different pathogenesis, response to treatment and prognosis, they are usually treated on the same line initially. Treatment consists of immunosuppression with steroids; following which plasma exchange, intravenous immunoglobulin, cyclophosphamide pulses etc may be considered for refractory myelitis [3,4]. However, those with AFM need to be distinguished considering the poor response to treatment, expense, and risk of opportunistic infections secondary to further immunosuppression. Multifocal lesions, flaccid paralysis, bowel-bladder involvement, sensory level etc may be seen in both these entities initially. Presence of fever, patchy clinical involvement, a poor clinico-radiological correlation in the acute phase, cauda-equina enhancement, anterior horn involvement (owl-eye sign) in the subacute phase etc may subtly point towards flaccid myelitis.

A less aggressive approach should be adhered to, in cases with AFM. Early initiation of rigorous rehabilitative measures is recommended for both these causes of myelopathy and nerve transfers may have some role [5].

Author contribution

PM prepared the initial draft of the manuscript and reviewed the literature, LS & SK – critical review of the manuscript and reviewed the literature, edited the final version of the manuscript.

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