“Parenthesis sign” in Eastern equine encephalitis

“A 65-year-old man from the Northeastern United States presented in the summer with headaches, fever, and severe encephalopathy. Cerebrospinal fluid (CSF) demonstrated lymphocytic pleocytosis and hyperproteinorachia. Neuroimaging is shown in Figures 1 and 2. Serum and CSF showed positive immunoglobulin M (IgM) antibodies to Eastern equine encephalitis virus (EEEV).

EEEV is a mosquito-borne alphavirus. Although rare, it can cause severe arboviral encephalitis, with mortality >33%.1 Magnetic resonance imaging features such as the “parenthesis sign” (Figure 1) can help distinguish between Eastern equine encephalitis and other encephalitides.2 Although most publications on EEEV originate from North America, EEEV and other related alphaviruses also circulate in the Caribbean, Central America, and South America.3–5
Authors’ Contributions
MBS: case concept and design, literature review, manuscript writing; ACA: interpretation of data, manuscript revision for intellectual content; MV: case concept and design, acquisition of data, figure editing, manuscript revision for intellectual content.

Conflict of Interest
The authors have no conflict of interests to declare.

References
5 Gil LHVG, Magalhaes T, Santos BSAS, et al. Active Circulation of Madariaga Virus, a Member of the Eastern Equine Encephalitis Virus Complex, in Northeast Brazil. Pathogens 2021;10 (08):10

Figure 2  T2/FLAIR hyperintensities extend into the mesial temporal lobes, midbrain, periaqueductal gray, and dorsal pons. Additionally, a dilated perivascular space is noted (asterisk).