Extra Cranial Etiology of Acute Onset Ataxia and Weakness: Small but Deadly

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Case Summary

A 4 year old girl presented to the emergency department as a stroke alert with acute onset ataxia and leg weakness. She experienced repeated falls and inability to move her legs. Her neurologic examination revealed ataxia, bilateral distal predominant weakness, and loss of reflexes. She underwent MRI brain which identified a tick on the right occiput (Figure 1). The patient decompensated and was sent to the PICU where the tick was carefully removed (Figure 2). She fully recovered four days later.

Tick paralysis is a rare etiology of ataxia and weakness in children. Its mortality has is approximately 11.7%. Symptoms are secondary to neurotoxin that 70/900 species of tick carry1. Children with long and thick hair should be thoroughly examined for the presence of a tick in presentations of ataxia, progressive neuromuscular weakness and loss of reflexes1. Treatment is removal of offending agent and supportive care1. The prognosis is excellent with prompt removal1.

Figure Legends

Figure 1:
Sagittal and Axial BRAVO MRI Brain images showing extra cranial tick.
Figure 2:
Gross image of tick on skin of patient.

References: