Neonatal dentate nucleus T2 hyperintensity after in utero metronidazole exposure

Figure Imaging abnormalities after in utero metronidazole exposure



T2-weighted axial brain MRI shows areas of hyperintensity in the bilateral dentate nuclei (arrows).

A 36-day-old boy born at 35 weeks' gestation presented with intermittent hypothermia, bradycardia, failure to thrive, and decreased activity. Neurologic examination demonstrated diffusely decreased tone and strength. Brain MRI (figure) showed findings characteristic of metronidazole toxicity. The mother had completed a course of metronidazole, which crosses the placenta, in the late third trimester for bacterial vaginosis. Metronidazole-induced toxicity in adults results in encephalopathy, but there are no data regarding neurologic toxicities in neonates following in utero exposure. Symptoms resolved with supportive care within 2 weeks. Four months later, there were no neurodevelopmental concerns. The family declined further imaging.

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