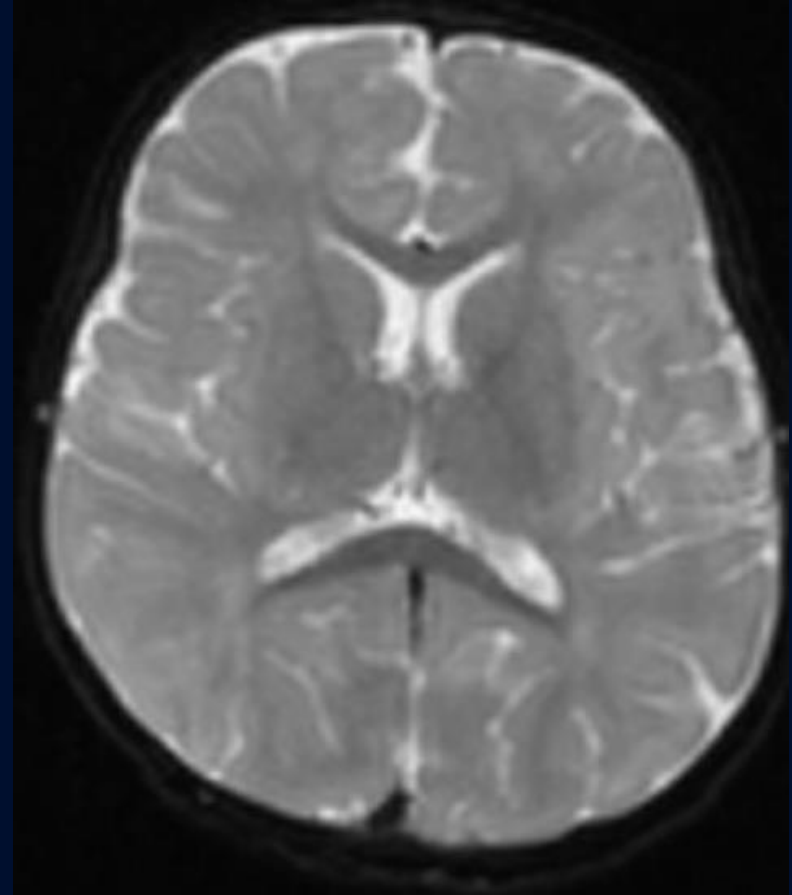
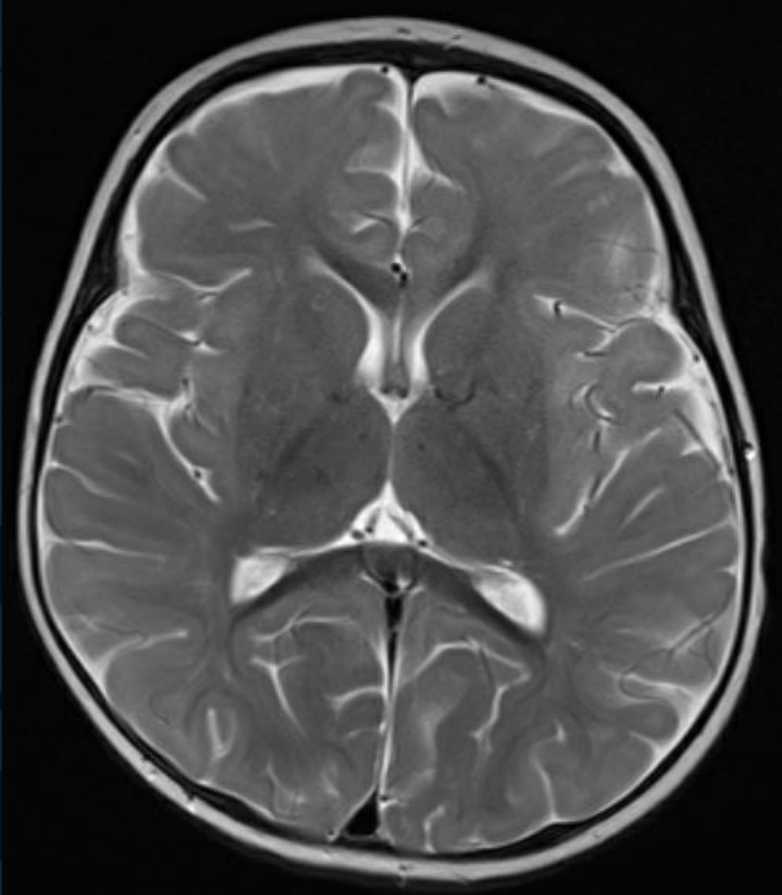


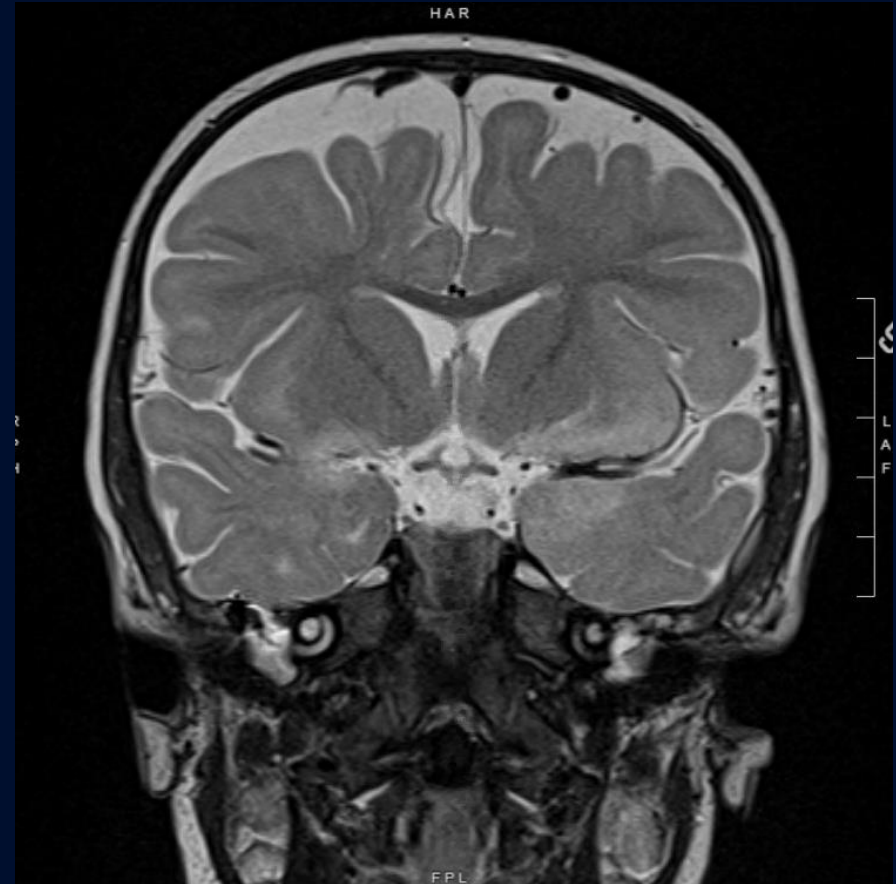
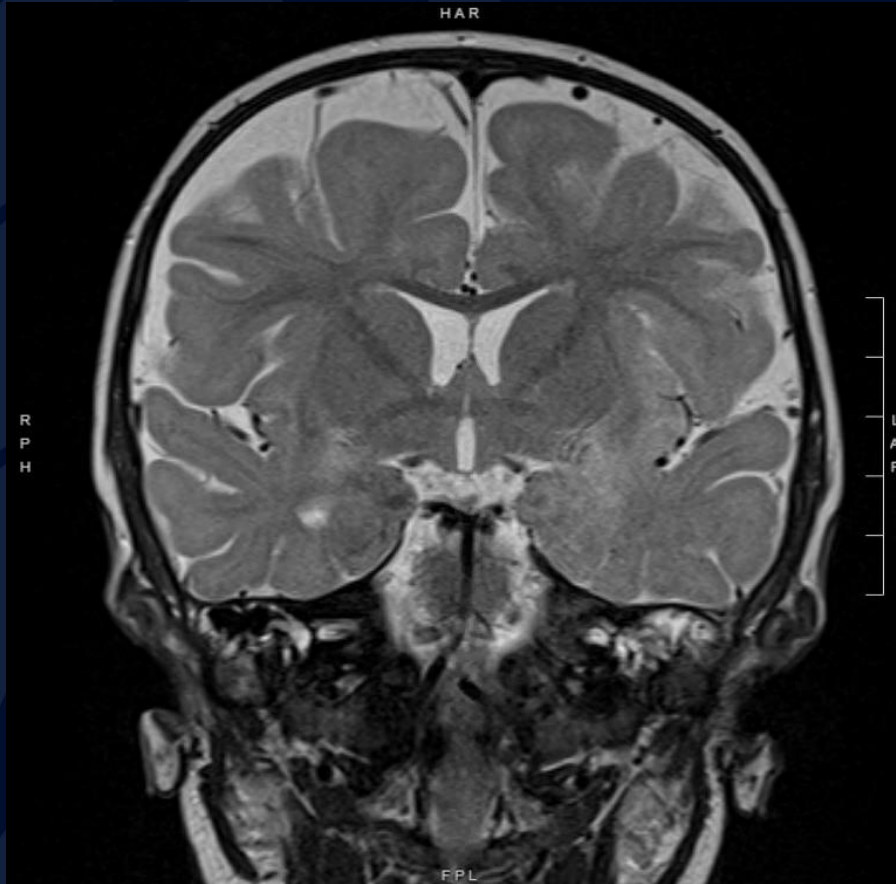
12-month-old female with new onset seizures after recent viral illness

Kristin Kinstler, MS3

T2



T2



A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

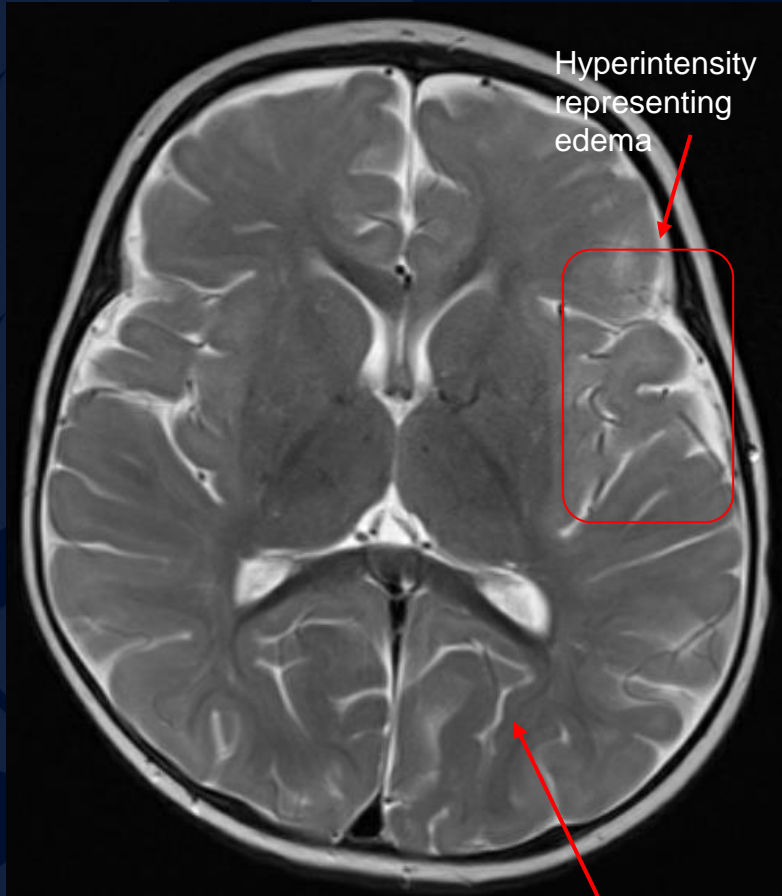
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A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the text.

HSV-1

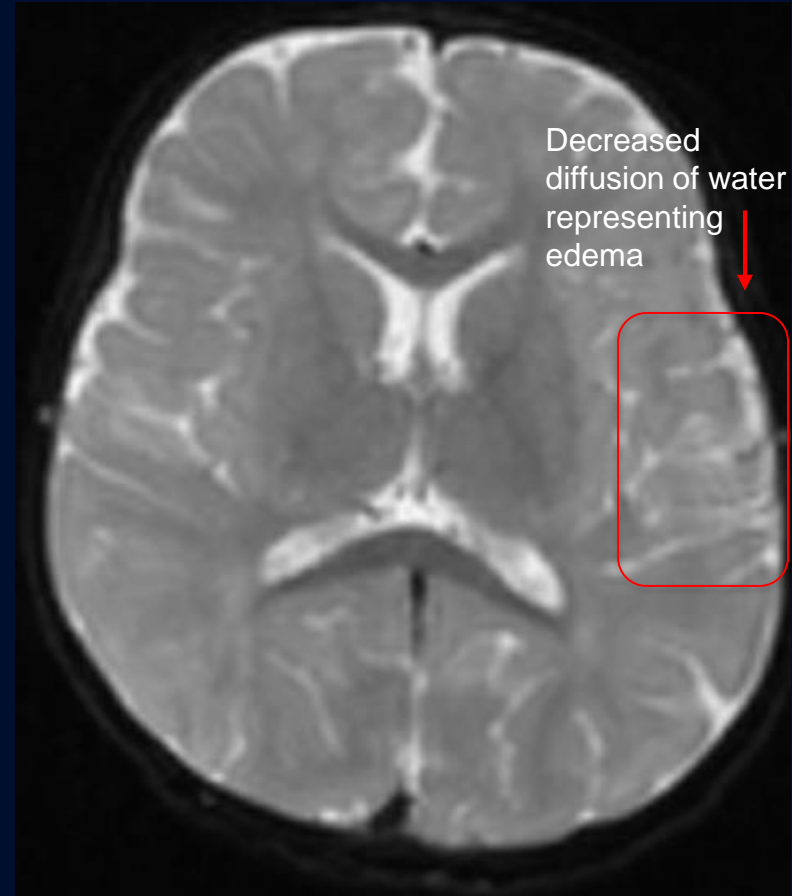
Meningoencephalitis

T2



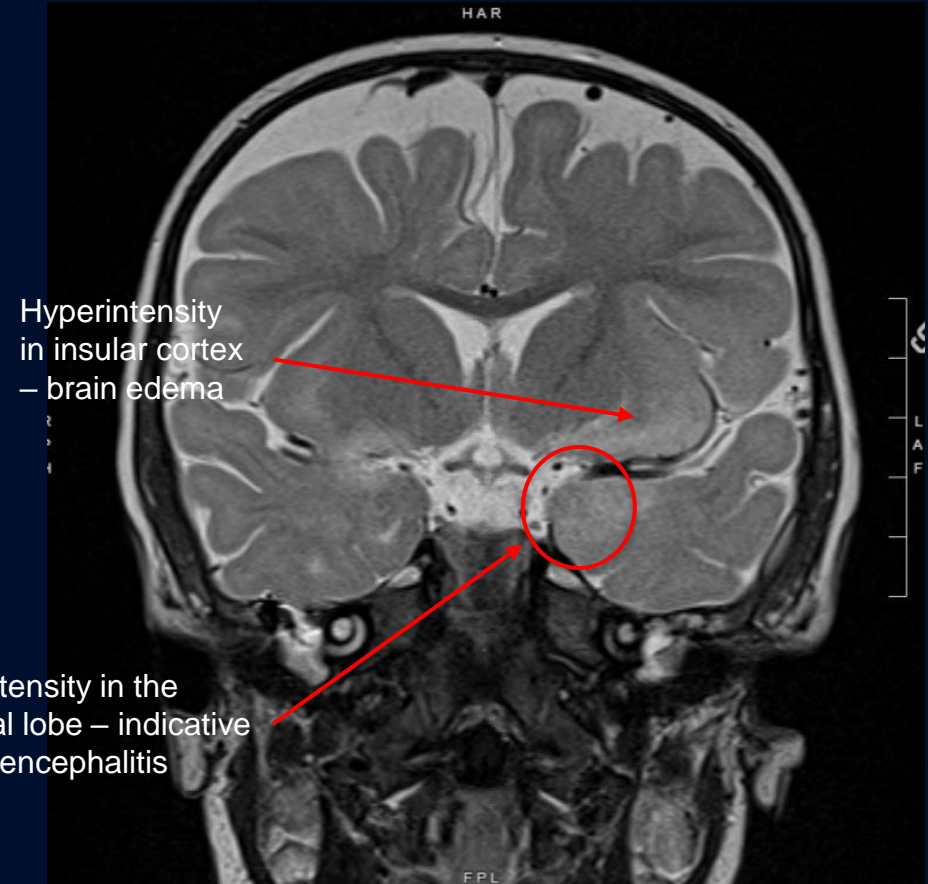
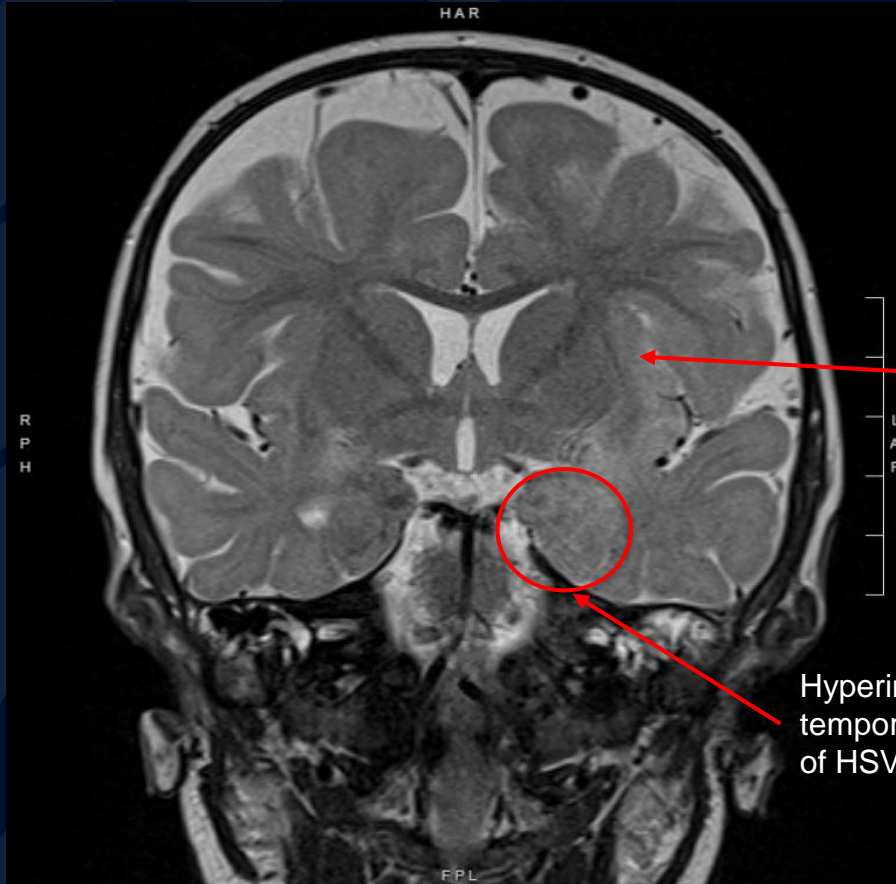
Leptomeningeal enhancement indicating meningitis

DWI



Decreased diffusion of water representing edema

T2



HSV-1 Meningoencephalitis

- Rare but the most common cause of viral encephalitis in children
 - It can be caused by either HSV-1 or HSV-2
 - HSV-2 most commonly causes neonatal herpes encephalitis, while HSV-1 most commonly causes herpes encephalitis in infants and children
 - HSV-1 encephalitis may be indicative of TLR3 pathway deficiencies
- Children with HSV encephalitis will often present with altered mental status, seizures, and/or focal neurological findings
- CSF of patients with HSV meningoencephalitis will often have red blood cells, pleocytosis, normal glucose, and normal or elevated protein
 - Red blood cells present due to hemorrhagic/necrotizing encephalitis
- **Imaging typically shows brain edema limited to the temporal lobe**
- Treatment requires three weeks of IV acyclovir, followed by prolonged prophylaxis with oral acyclovir
 - Even with sufficient treatment, long-term complications such as developmental delay and regression may occur
 - Anti-NMDA encephalitis (a form of autoimmune encephalitis) should be considered in patient with recent HSV encephalitis that present with recurrent neurological symptoms

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