


Life in the Dark

Best Kept Secrets of Neuroradiologists

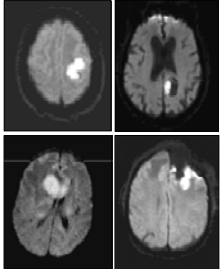
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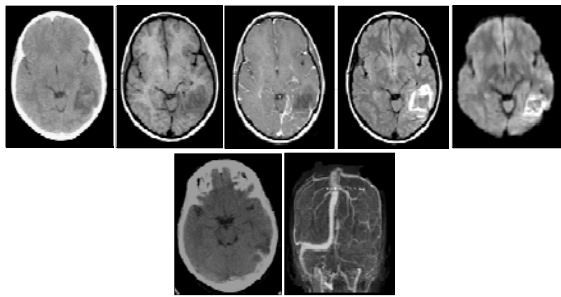
Diffusion-Weighted Imaging (DWI)

4 etiologies of restricted diffusion

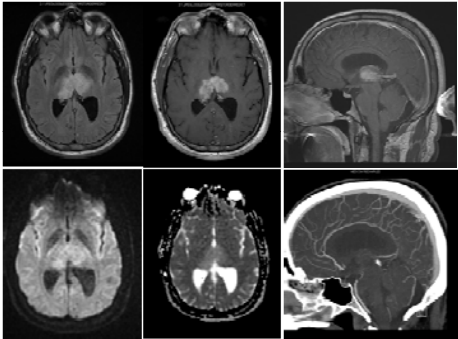
- failure Na⁺/ATP pump
 - ischemia
 - severe seizures
- dense cellularity
 - tumor
- proteinaceous states
 - abscess: bacterial & fungal, not Toxo
 - methemoglobin
- tissue vacuolization
 - spongiform change (CID)
 - acute demyelination & DAI (rare)



Venous Lesion: Vein of Labbe



Venous Lesion: Int Cereb Veins



Radiology Reports are Not Created Equal

IMPRESSION:

1. Minimal chronic bilateral ethmoid sinus disease
2. Left frontal craniotomy changes, with underlying left frontal surgical cavity. The greater proximity postoperative enhancement are noted within the periphery of the cavity
3. Abnormal FLAIR hyperintensity and patchy enhancement extending to the right of midline through the corpus callosum into the right frontal lobe, and inferiorly into the basal ganglia appear more prominent, with worsening of local mass effect, sulcal enlargement/effacement, and leftward shift of midline structures. Findings are concerning for disease progression; although, superimposed abnormal diffusion signal suggests a component of tumor necrosis or posttreatment change. Recommend continued close followup with brain MRI.

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IMPRESSION:

1. Increasing extent of abnormal T2-weighted signal and mass effect in the right cerebrum. This is worrisome for progressive disease, although treatment effect could have a similar appearance.