

Subpial Hemorrhage in Neonate

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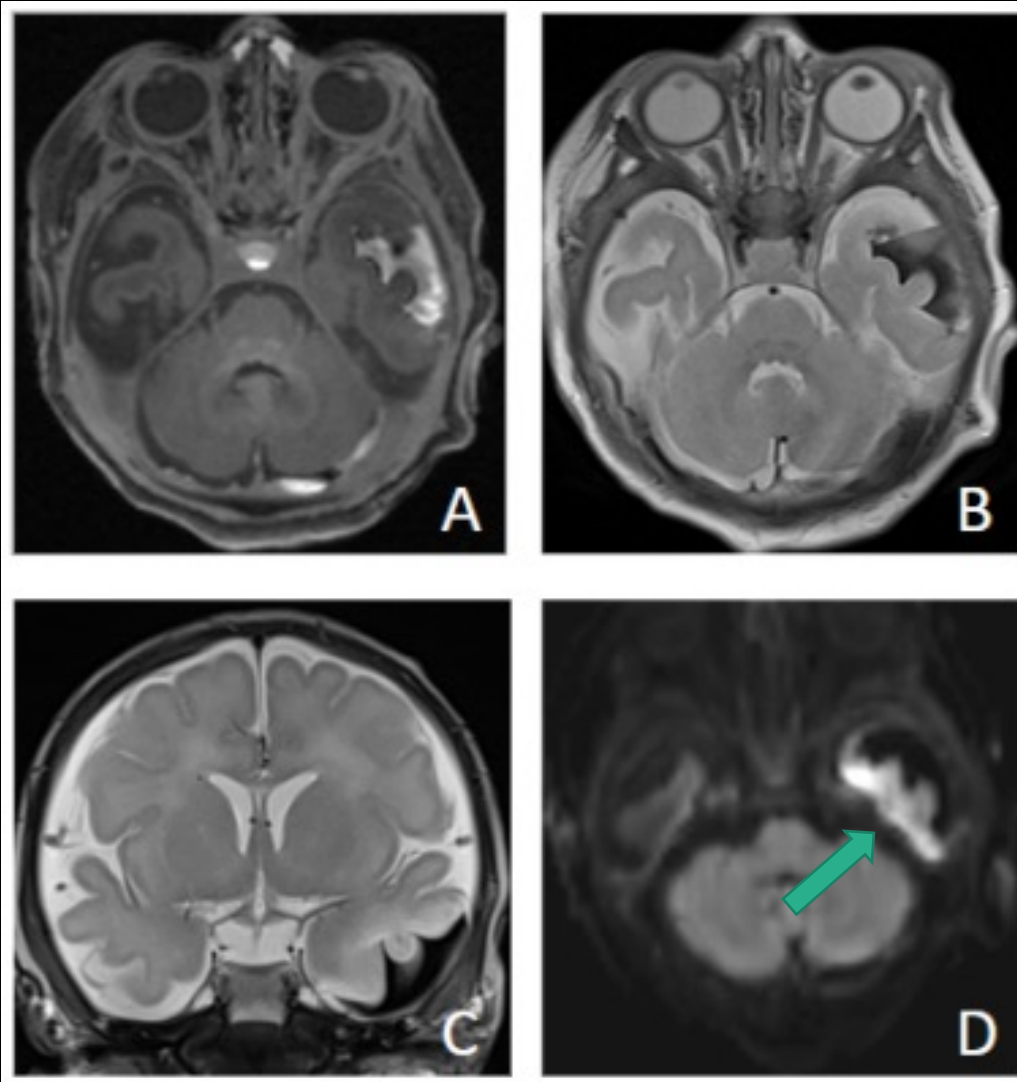


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Clinical Presentation

- Term neonate had seizure at day 0 after delivery which has prompted MRI brain.

Imaging Discussion



- A., B. and C. MRI brain at 4 day old showed right temporal subpial hemorrhage which has T1 and T2 shortening consistent with late subacute hematoma.
- D. DWI showed restricted diffusion in the adjacent brain parenchyma.

Management and Outcome

- Neonate was diagnosed with subpial hematoma. He was seizure free after discharge from hospital.

Take Home Points

- Subpial hemorrhage is bleeding between pia mater and brain parenchyma which is mostly seen in neonates. Adjacent cortical damage is thought to be secondary to the mass effect of the pial vessels.
- Underlying parenchymal ischemia may suggest venous ischemia in the pathogenesis of subpial hemorrhage in neonate .

References

- Cain DW, Dingman AL, Armstrong J, Stence NV, Jensen AM, Mirsky DM. Subpial Hemorrhage of the Neonate. *Stroke*. 2020 Jan;51(1):315-318. doi: 10.1161/STROKEAHA.119.025987. Epub 2019 Nov 7. PMID: 31694507; PMCID: PMC7050827.