

CASE 2021 #2

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Clinical History: A female neonate was delivered at 39 weeks gestation via an emergency cesarean section due to non-reassuring fetal heart tones. Routine prenatal care and testing for the AB positive 35-year-old mother were unremarkable. At birth, the infant's respiratory effort was absent, and the infant was subsequently intubated. She was admitted to the neonatal intensive care unit due to concern for sepsis. An infectious work up and newborn screening test was performed with negative results. The infant died on day 3 shortly after being transitioned to comfort care.

Imaging: An MRI showed extensive areas of signal abnormality in both hemispheres and cerebellum. These areas appeared chronic in nature and included cystic lesions, architectural distortion, as well as presumed passive expansion of the left lateral ventricle. There were areas of susceptibility effect and T1 hyperintensity most likely representing hemorrhage.

Autopsy Findings: Autopsy showed a normally developed female infant and brain weight (299.67 gm) with scattered small hemorrhages in multiple organs/tissues. Gross examination of the brain revealed diffuse hemorrhages of chronologic heterogeneity, brainstem and cerebellar hemorrhages predominately centered in the white matter, and grossly visible cystic lesions.

Material Submitted: Image of a single coronal slice of the cerebral hemispheres

Points for discussion: 1. Gross Findings, 2. Microscopic Findings, 3. Differential Diagnoses, 4. Pathogenesis, 5. Disease Phenotypes