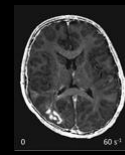
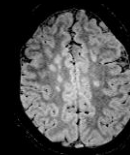
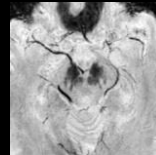
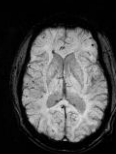
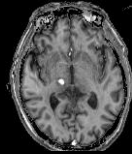


DISEASES AND CONDITIONS

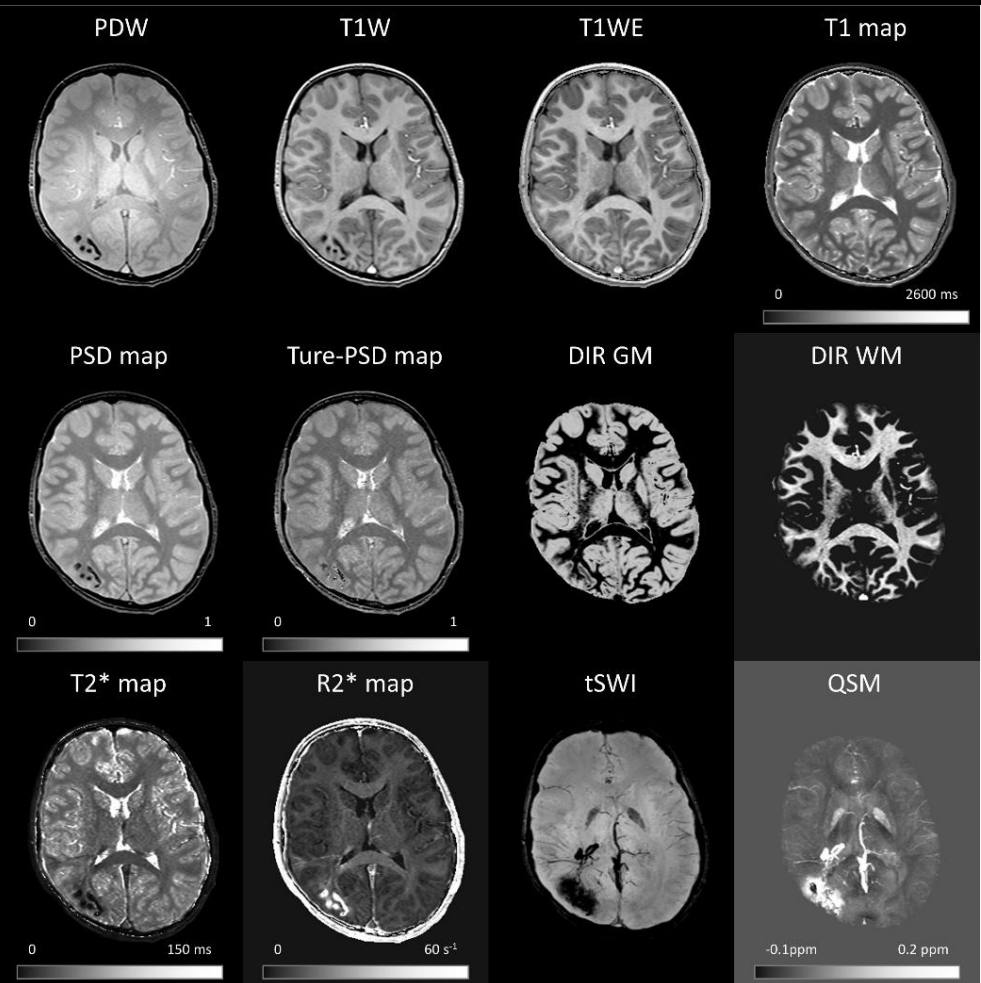
DISEASE	<u>Dementia</u>	<u>Stroke</u>	<u>TBI</u>	<u>Parkinson's</u>	<u>Multiple Sclerosis</u>	<u>Sturge-Weber</u>	<u>Tumor</u>
BIOMARKER	Microbleeds, Volumetrics	CMB, oxygenation	CMB, venous trauma	SN Swallow Tail Neuromelanin	FLAIR/SWI Mismatch	Calcium, bleeding	Vascularization, bleeding



STAGE at 3T for a child with Sturge Weber Syndrome

Eliminates need for contrast agent.

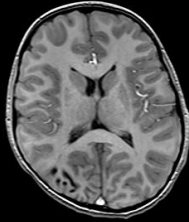
No CT required for differentiating bleeds from calcifications.



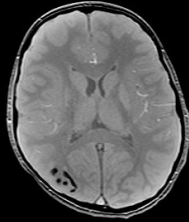
[1] Chen, et al., ISMRM 2019, p3021, May 14, 2019, Montreal, CA

STAGE APPLICATION: STURGE-WEBER

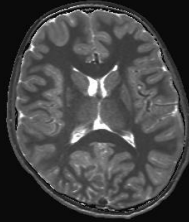
a) T1W



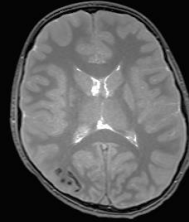
b) PDW



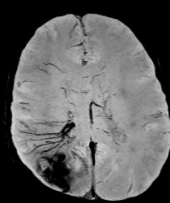
c) T1 MAP



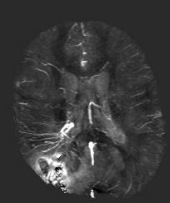
d) PD MAP



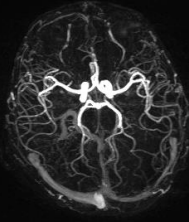
e) tSWI



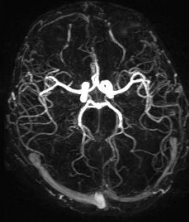
f) SWIM



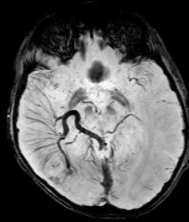
g) MRAV



h) MRA



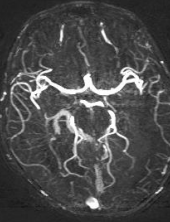
i) SWI



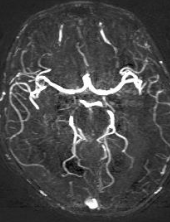
j) SWIM



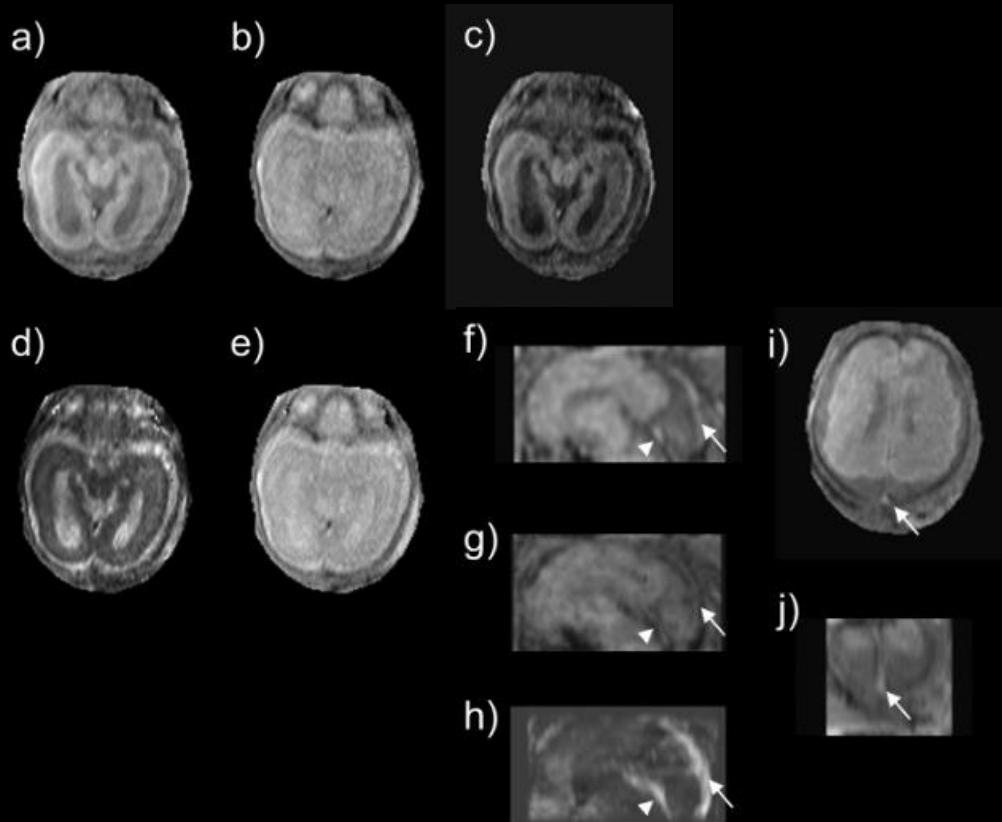
k) MRAV



l) MRA



Fetal Brain Imaging



- STAGE for fetal brain imaging (28-week gestational age, ventriculomegaly) using 2D acquisitions. a) T1W (FA = 75°); b) PDW (FA = 15°); c) T1WE; d) T1map; e) PSD map; f), i) and j) are T1W images in sagittal view, axial view and coronal view; g) and h) were the minimum/maximum intensity projection of SWI (g) and QSM (h) with effective slice thickness of 15 mm showing the superior sagittal sinus (arrow) and straight sinus (arrow head). Images in this figure were cropped from the original images of the mother.