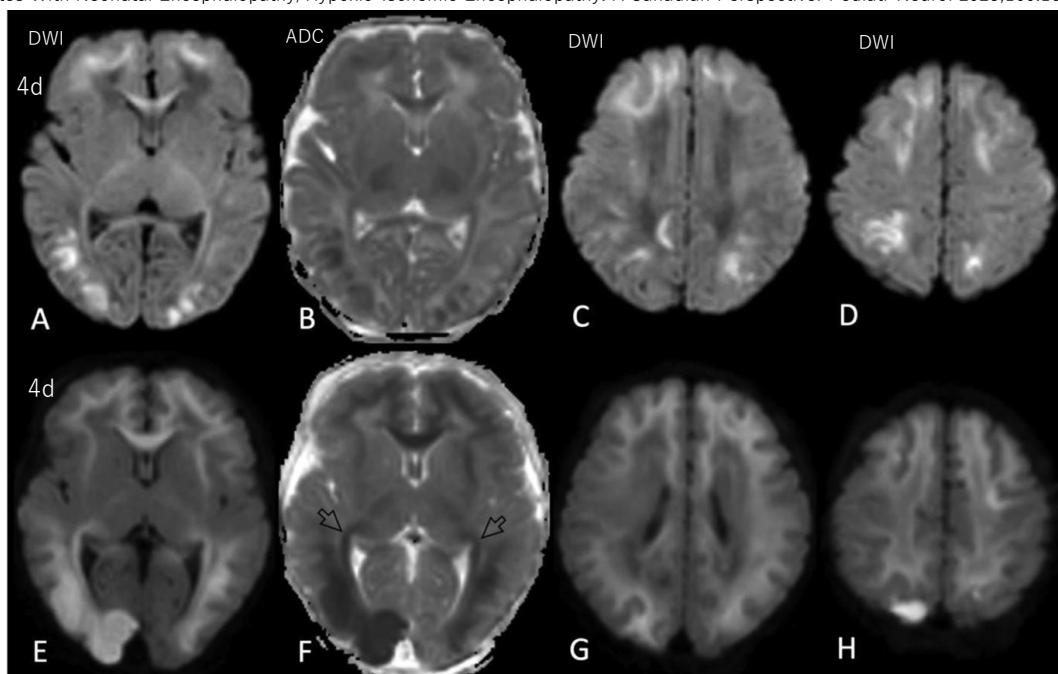
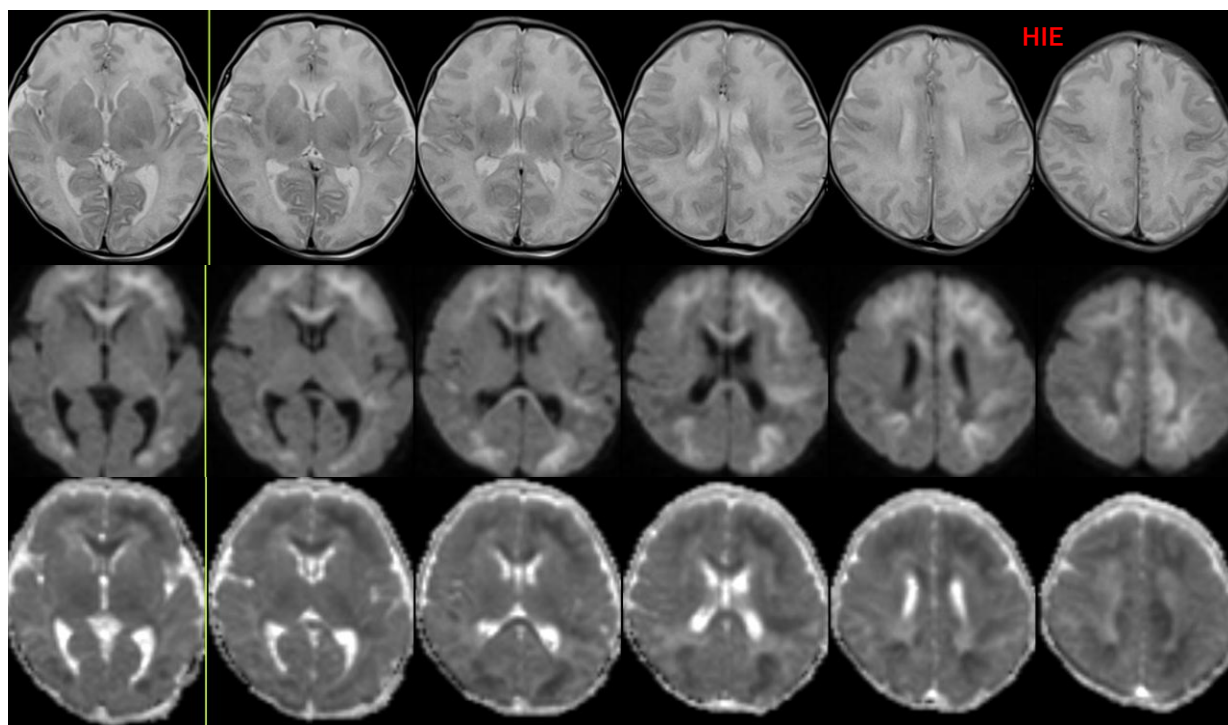




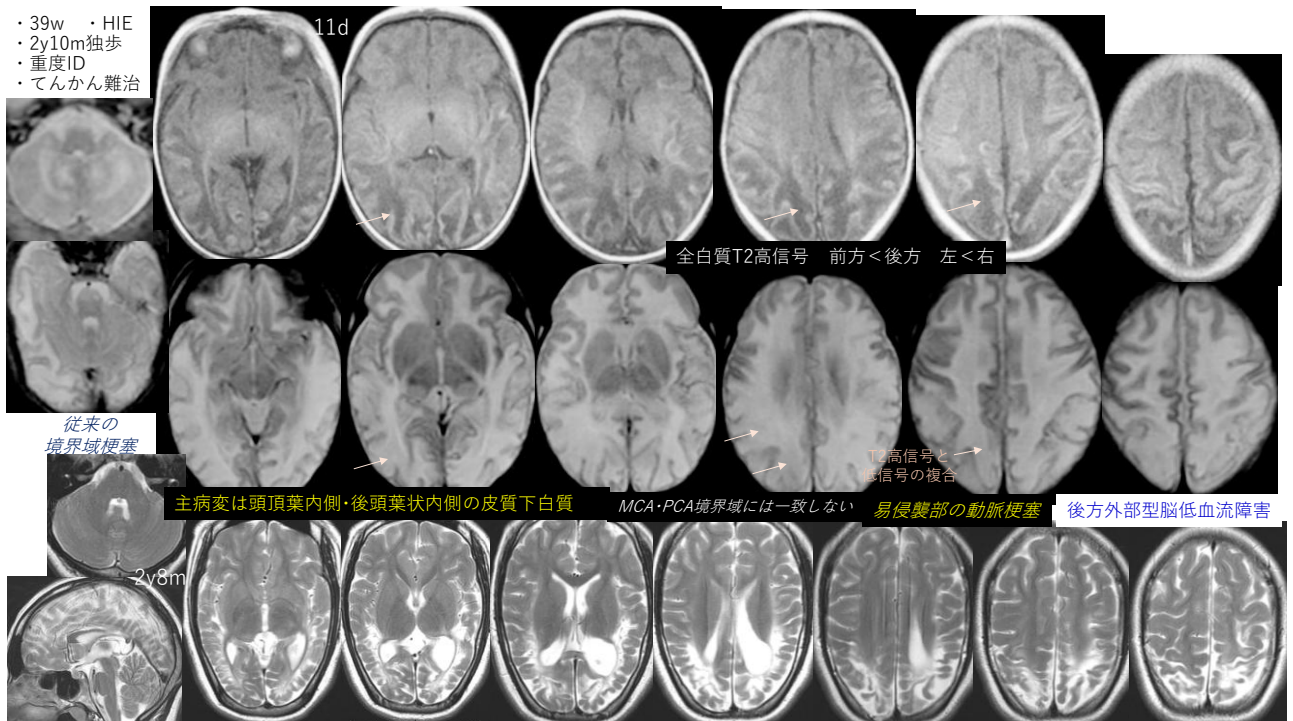
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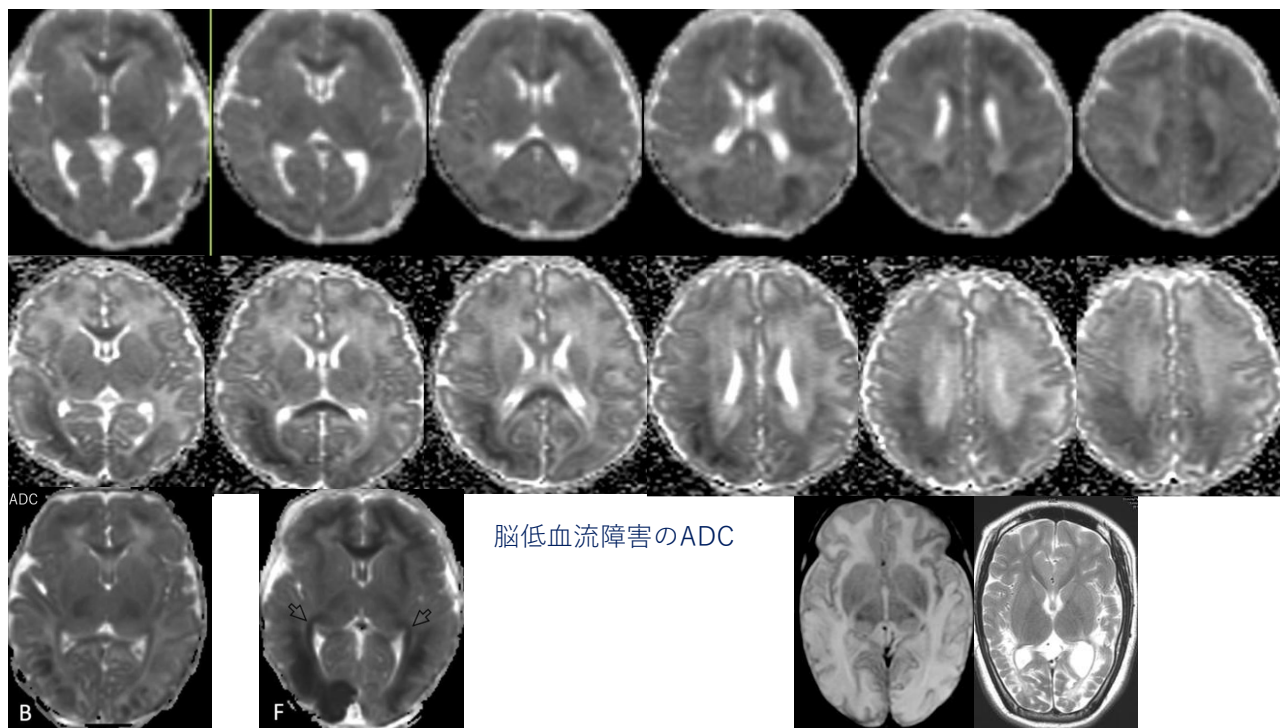
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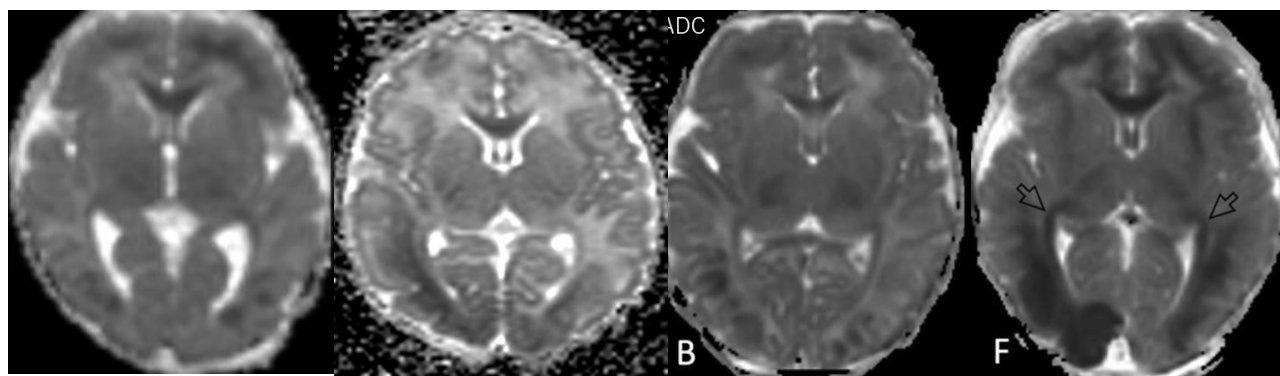
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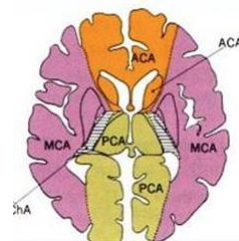


5



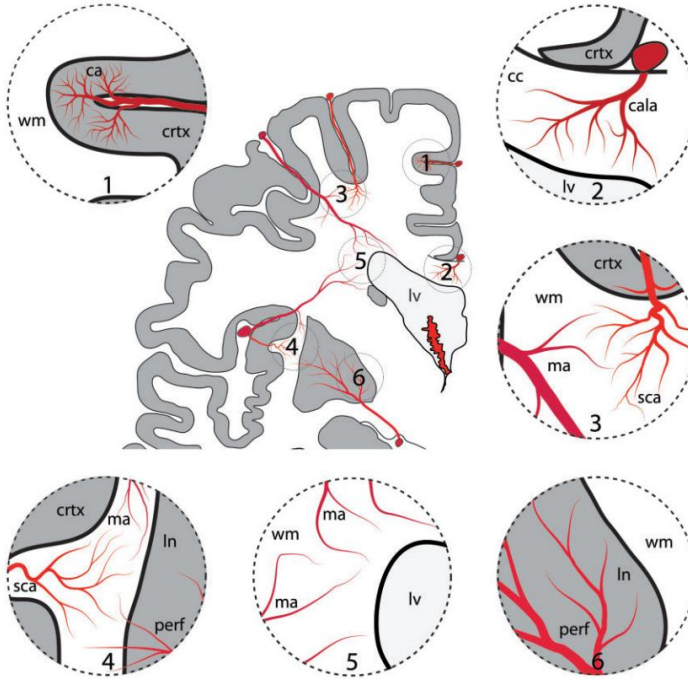
前頭葉皮質下部: ADC低~高 深部~側脳室周囲: ADC高
 後方脳(後頭葉・側頭葉・頭頂葉)皮質下部: ADC低
 深部~側脳室周囲: ADC低~高 内矢状層: ADC低

前頭部と後頭部の皮質下白質病巣の症候となる



6

Smirnov M, et al. **Cerebral white matter vasculature: still uncharted?** Brain 2021;144;3561–75.



Type 1: Arterial vascularization of the cortex depends on short arterioles originating from the same pial vessels (single source juxtaposed (並列) supply).

Type 2: The corpus callosum is supplied by short arterioles originating from the pial network (single source juxtaposed supply).

Type 3: Short association U-fibers are supplied by subcortical arteries and earliest branches of medullary arteries (dual source interdigitated supply).

Type 4: The external capsule, claustrum and extreme capsule take up subcortical arteries, earliest branches of medullary arteries, and terminals of perforating arteries of the base of the brain (triple source interdigitated supply).

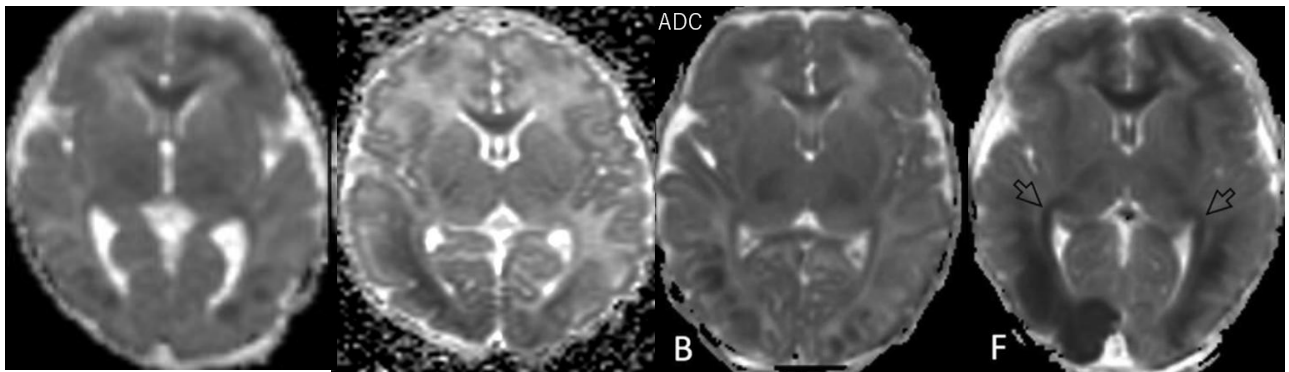
Type 5: The centrum semiovale is supplied by terminals of deep white matter arteries (single source juxtaposed supply).

Type 6: Vessels supplying the basal ganglia and the thalamus are long, perforating arterioles and arteries originating from the base of the brain (single source juxtaposed supply).

cc = corpus callosum; crtx = cortex; ln = lentiform nucleus; lv = lateral ventricle; ma = medullary artery; perf = perforating artery; sca = subcortical artery; wm = white matter.

前頭部と後頭部でType 3の脳低血流障害が周生期には起こりやすい

7



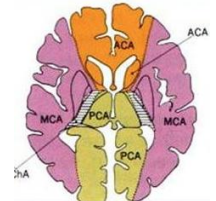
前頭葉皮質下部: ADC低~高 深部~側脳室周囲: ADC高

後方脳(後頭葉・側頭葉・頭頂葉)皮質下部: ADC低

深部~側脳室周囲: ADC低~高 内矢状層: ADC低

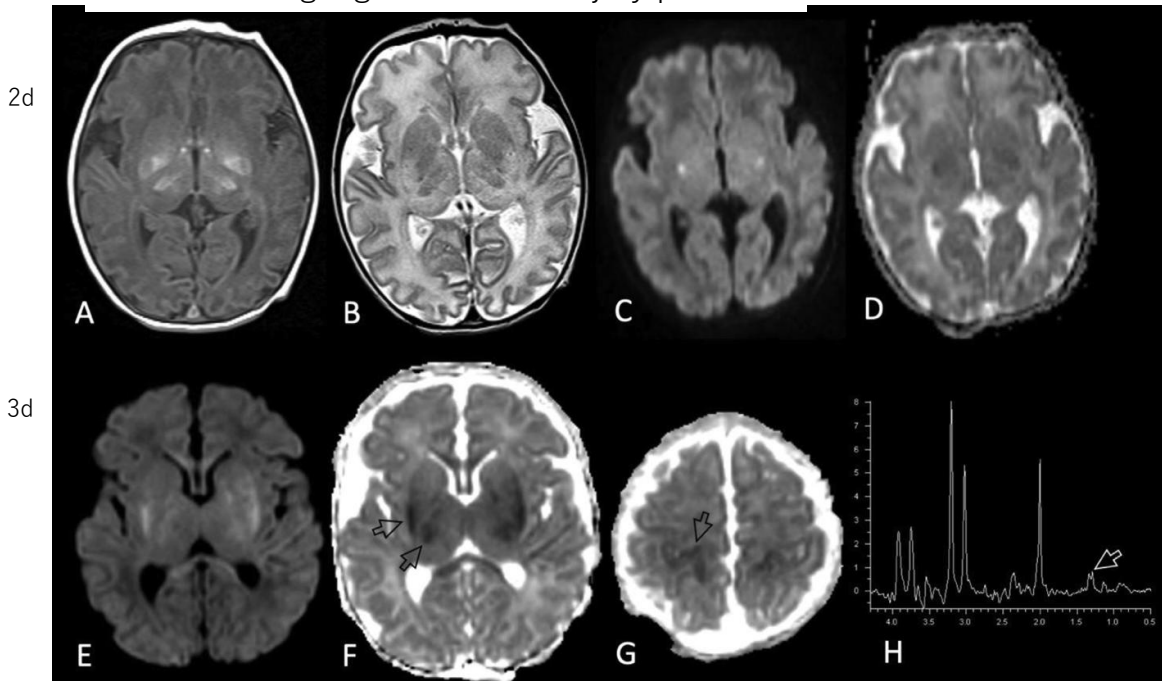
前頭部と後頭部でType 3の脳低血流障害が周生期には起こりやすい

- 前頭部と後頭部の皮質下部はあるレベル以上の低血流になれば梗塞となる
 - これ以外の部 (境界域(分水嶺)を含めて) では、この程度の低血流では梗塞にはならない
- Type 3 脳低血流を起こしやすい領域はborderzone (watershed)領域ではない
→周生期にborderzone (watershed) infarctionはない



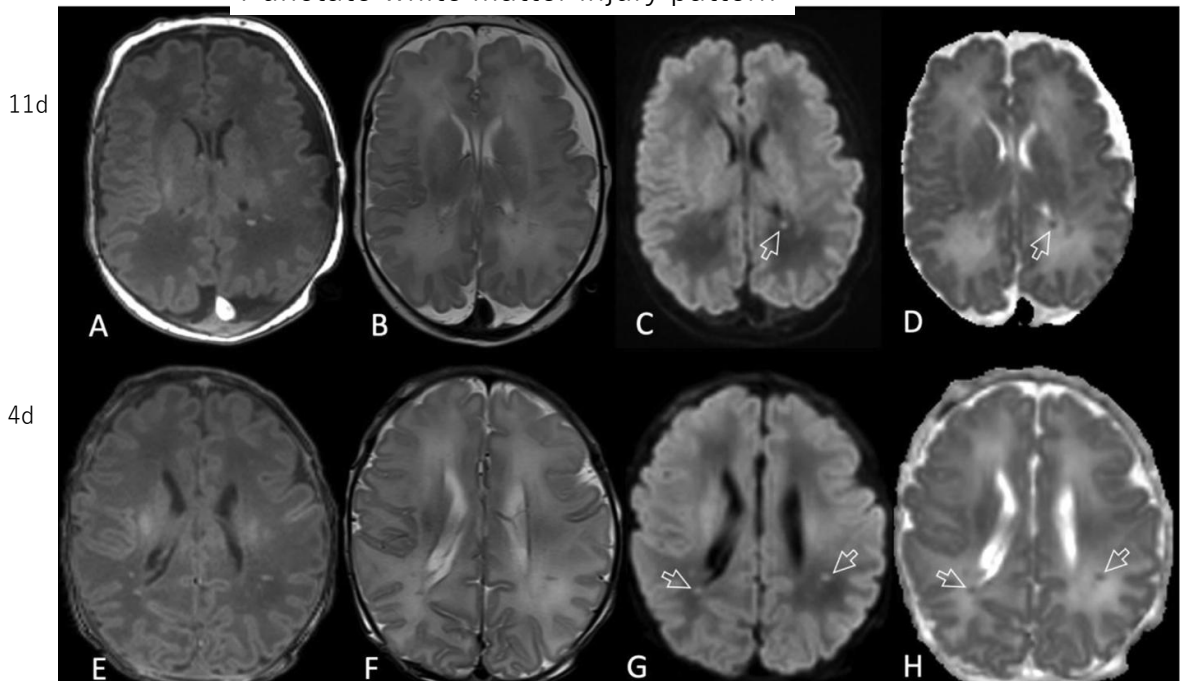
8

Central basal ganglia-thalamus injury pattern



9

Punctate white matter injury pattern



10