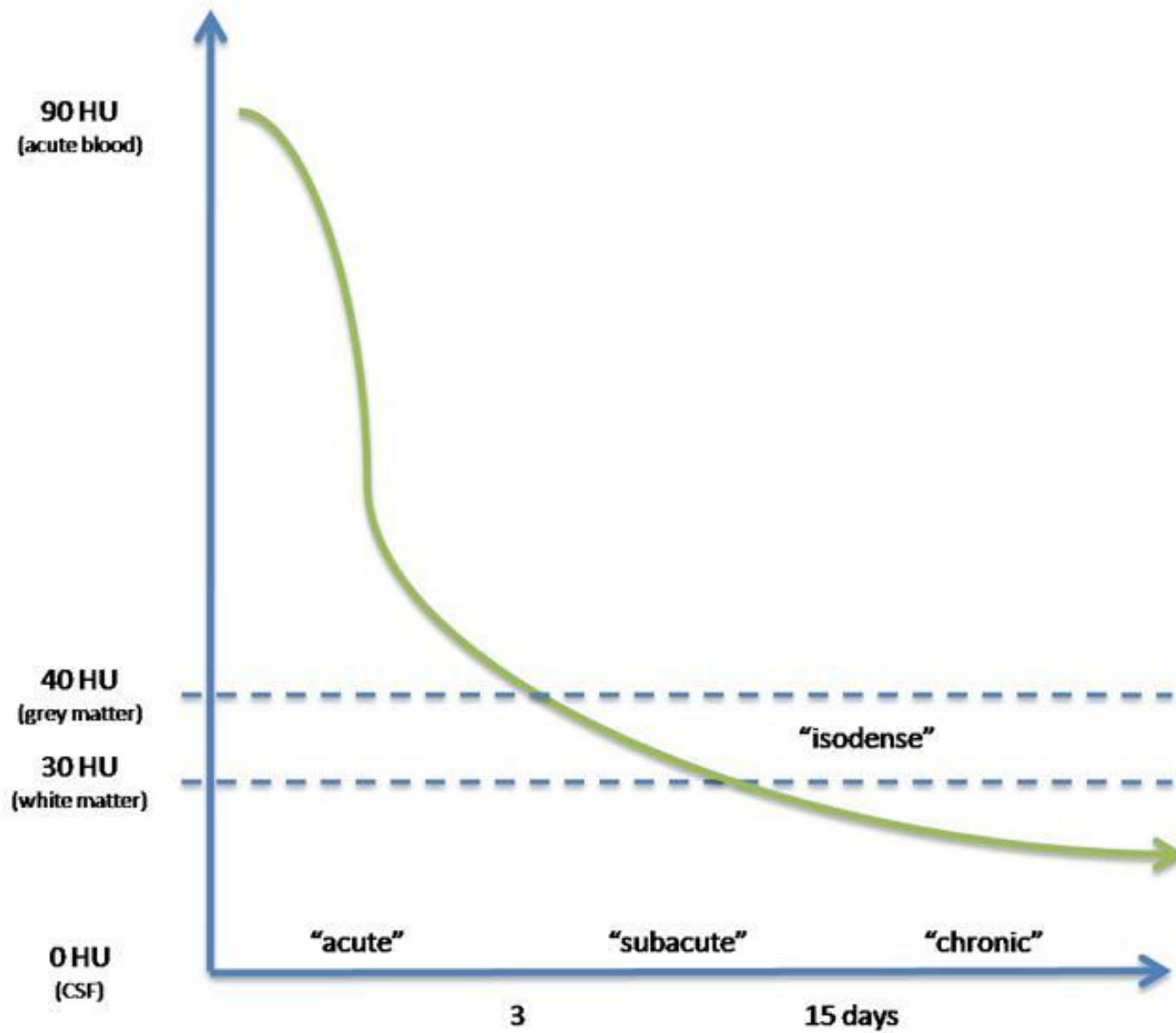
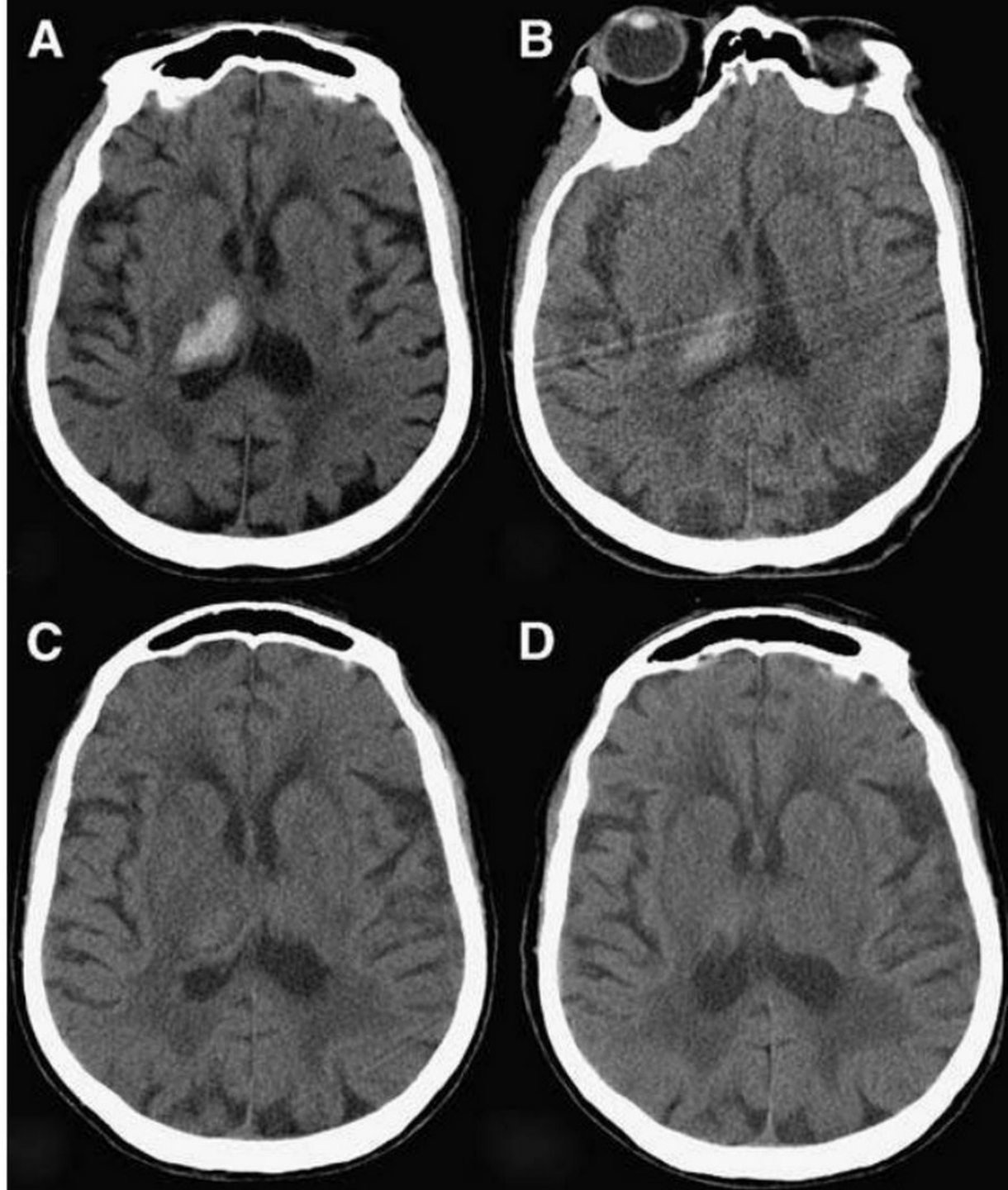
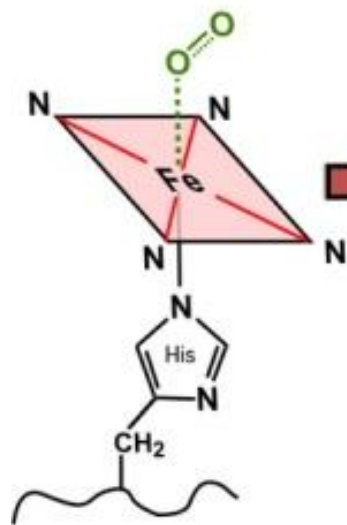


CT



CT appearance of hemorrhage. Serial CT scans of right thalamic hematoma. (A) Acute ICH in the right thalamus with mean attenuation 65 HU. (B) CT performed 8 days later than (A); the periphery of the hematoma is now isodense to the brain while the center of the hematoma has mean attenuation 45 HU. (C) CT performed 13 days later than (A) shows continued evolution of the hematoma with decreasing attenuation. (D) CT performed 5 months later than (A) shows a small area of encephalomalacia in

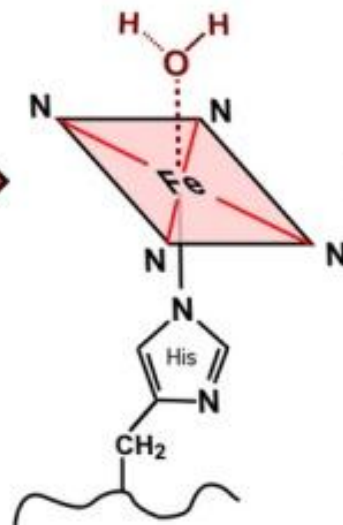




Oxyhemoglobin
(O₂)



Deoxyhemoglobin
(empty)



Methemoglobin
(H₂O or OH⁻)



Hemichromes
(E7 His residue)

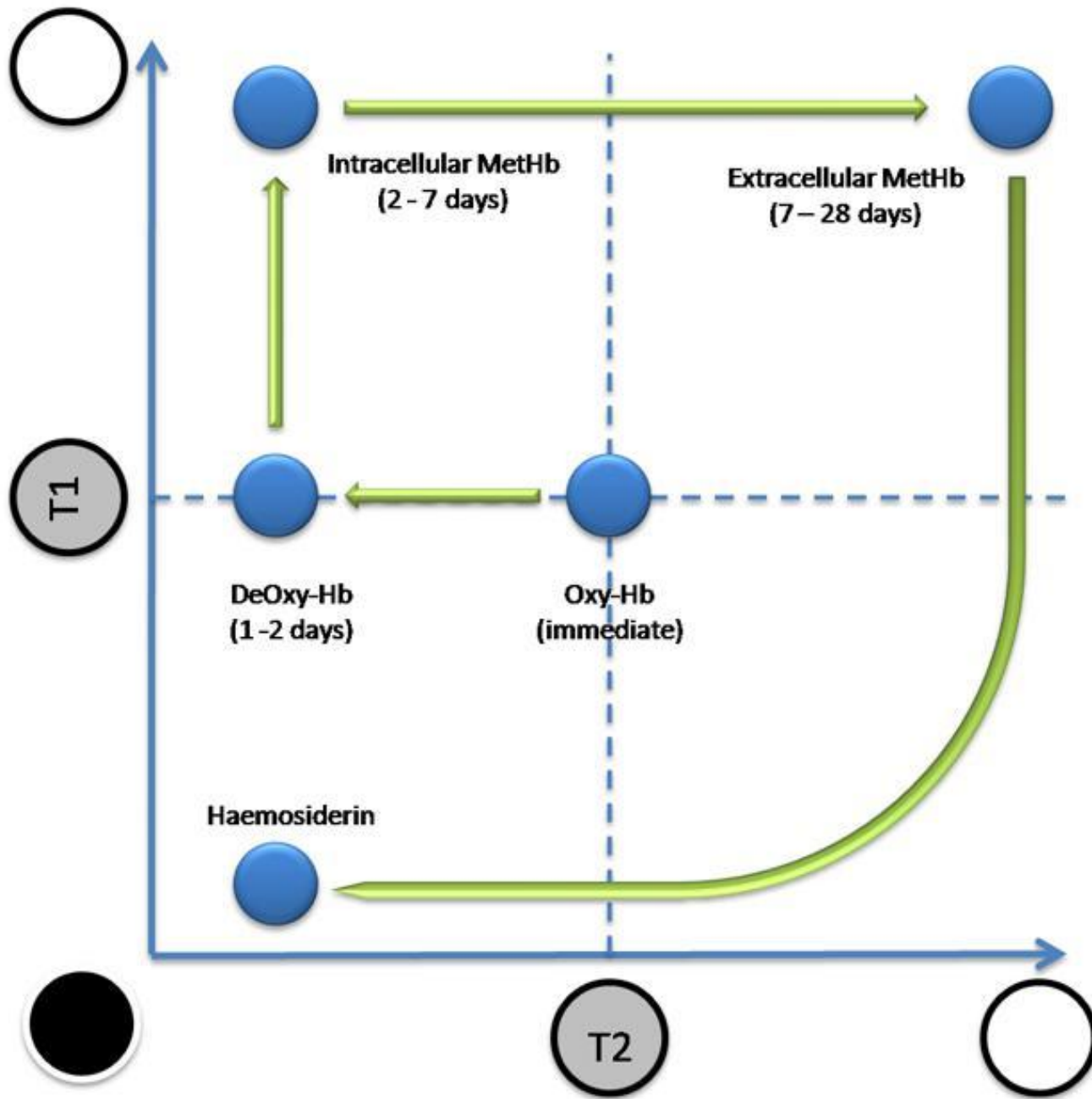


*Ferritin/
Hemosiderin*



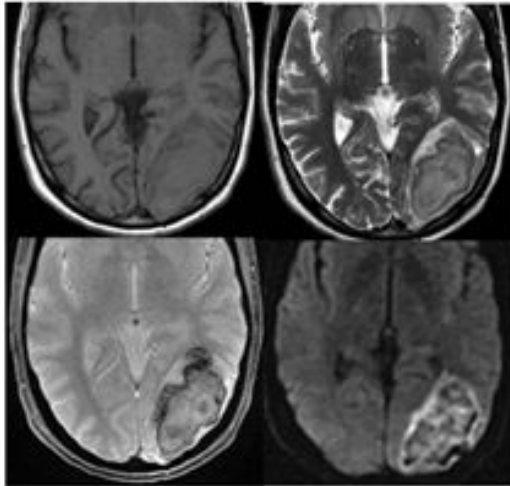
Hemoglobin Derivative	# Unpaired Electrons	Magnetic Susceptibility (χ)
Oxyhemoglobin (Oxy-Hb)	0	Diamagnetic
Deoxyhemoglobin (Deoxy-Hb)	4	Paramagnetic
Methemoglobin (Met-Hb)	5	Paramagnetic
Hemichromes	0	Diamagnetic
Ferritin	10,000+	Superparamagnetic
Hemosiderin	100,000+	Superparamagnetic

MRI



Hyperacute Hematoma

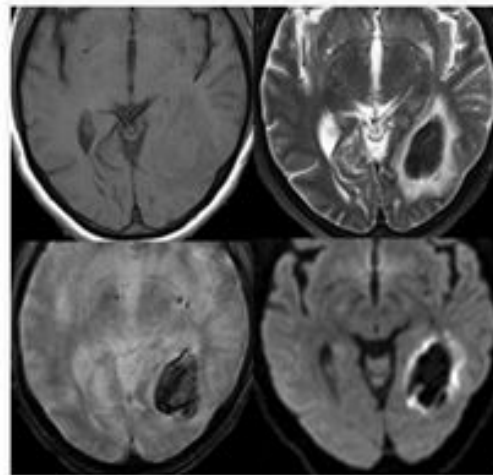
(< 12 hours)



Oxyhemoglobin

Acute Hematoma

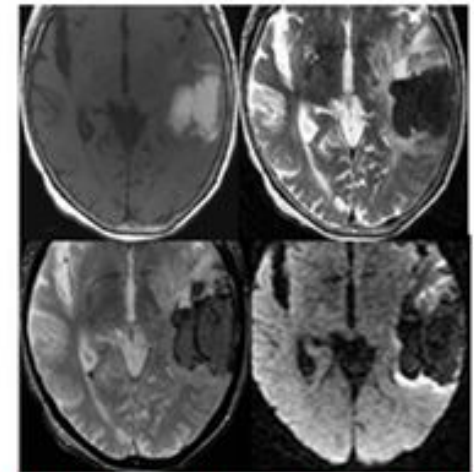
(12 hours - 2 days)



Deoxyhemoglobin

Early Subacute Hematoma

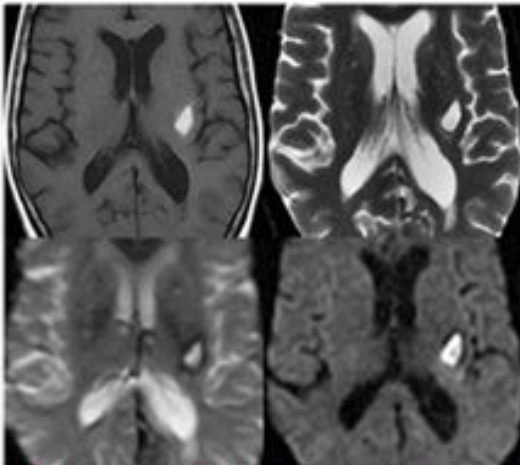
(2 days - 1 week)



Methemoglobin (Intracellular)

Late Subacute Hematoma

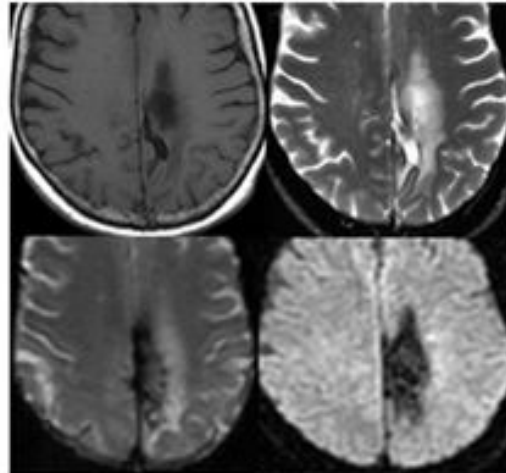
(1 week - 2 months)



Methemoglobin (Extracellular)

Chronic Hematoma

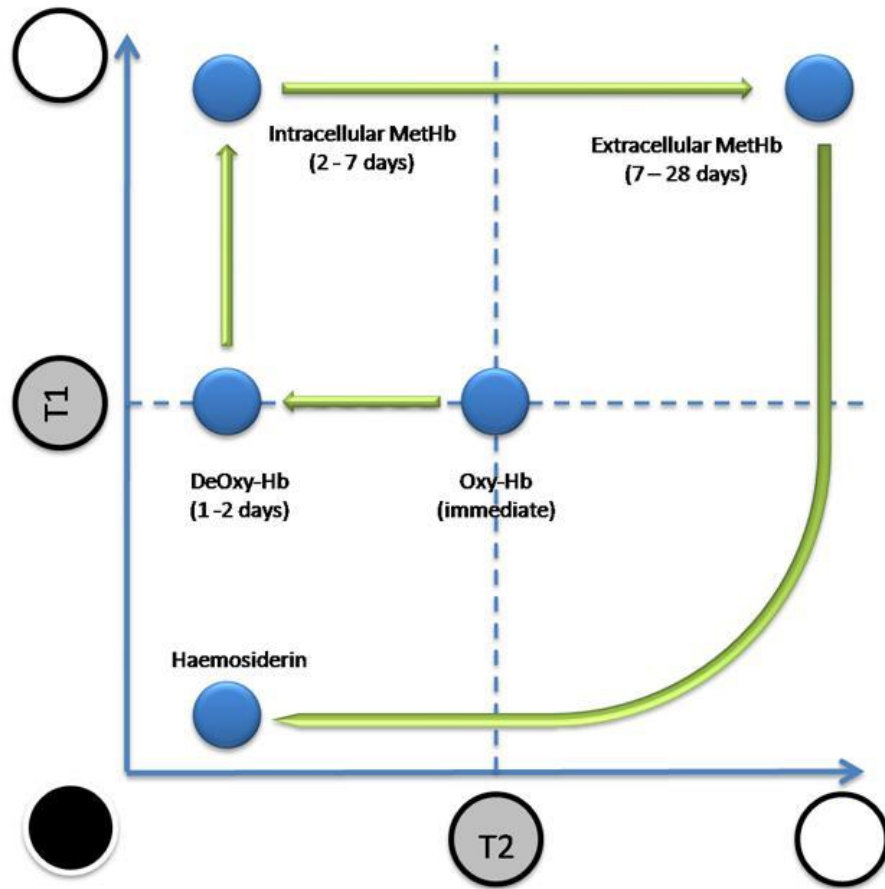
(> 2 months)



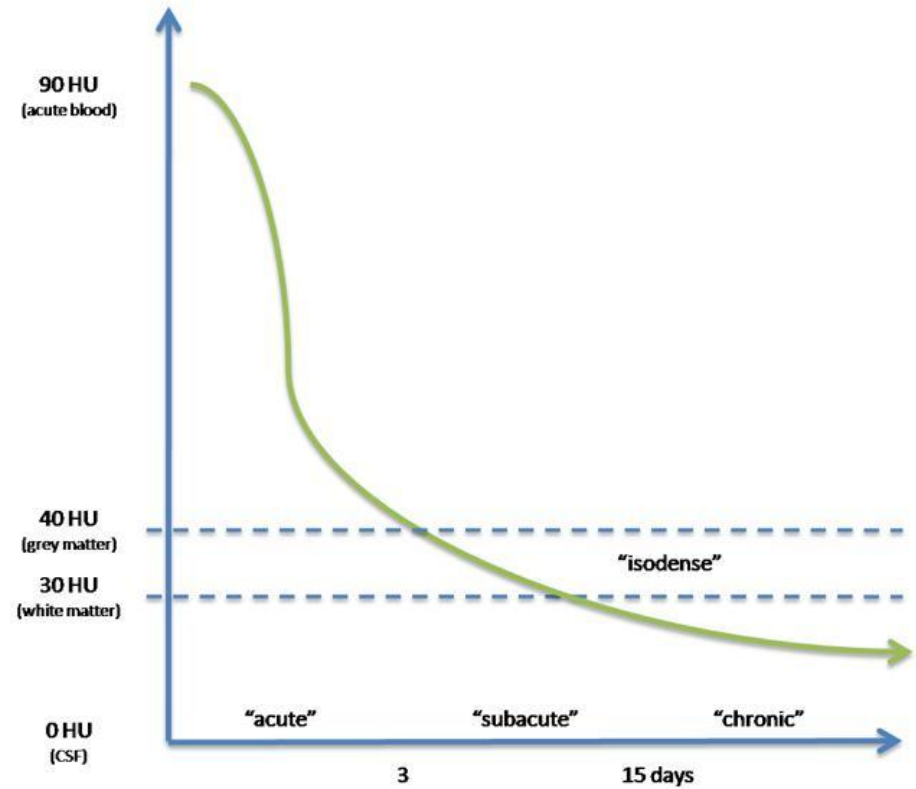
Ferritin/Hemosiderin

T1	T2
T2*	DWI

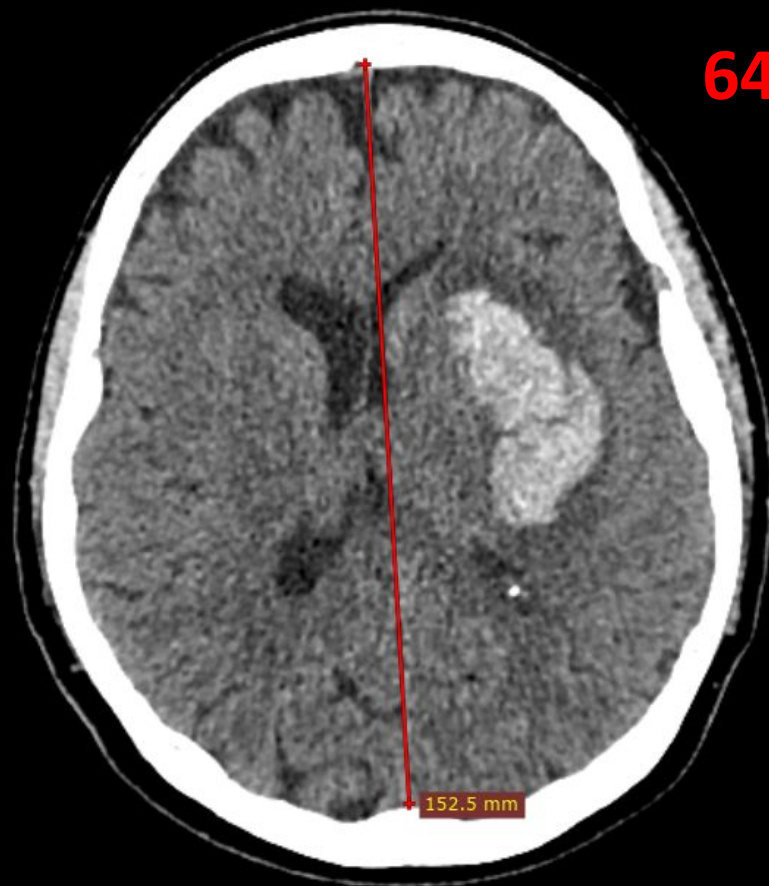
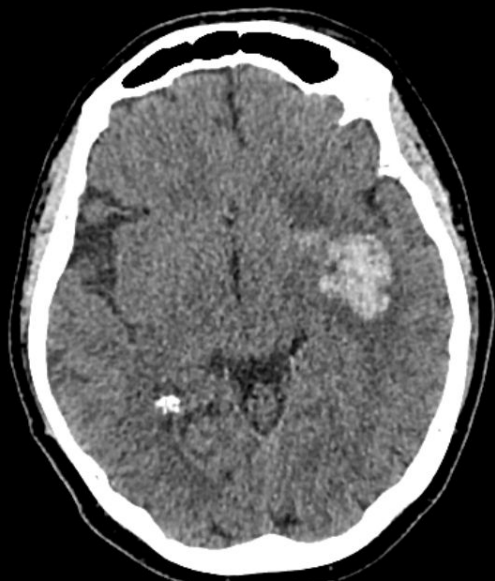
MRI



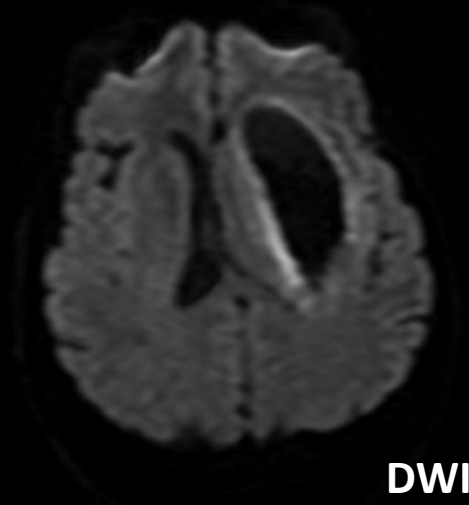
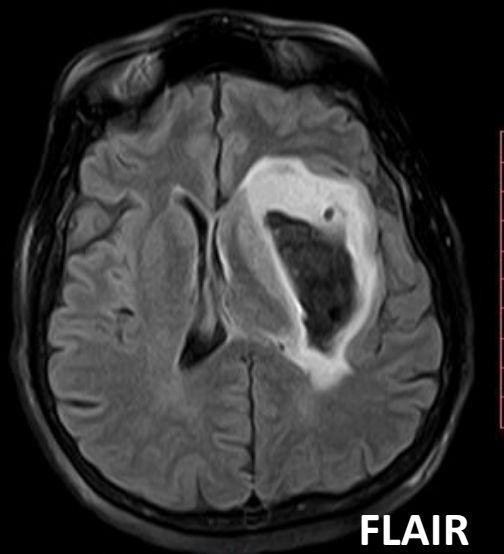
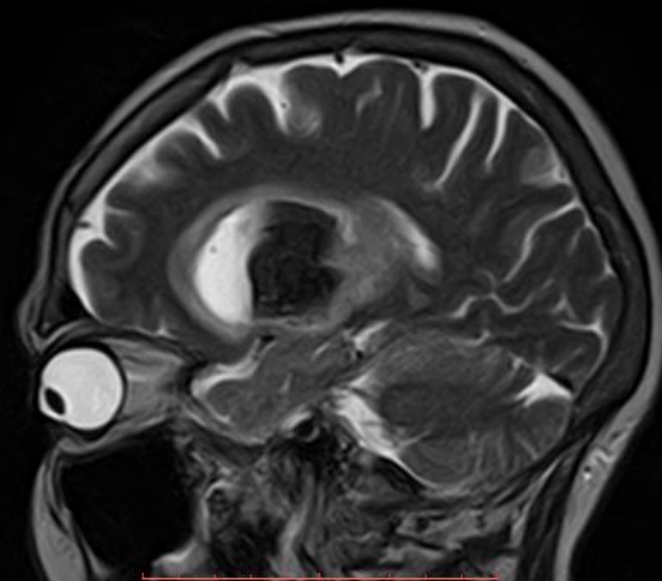
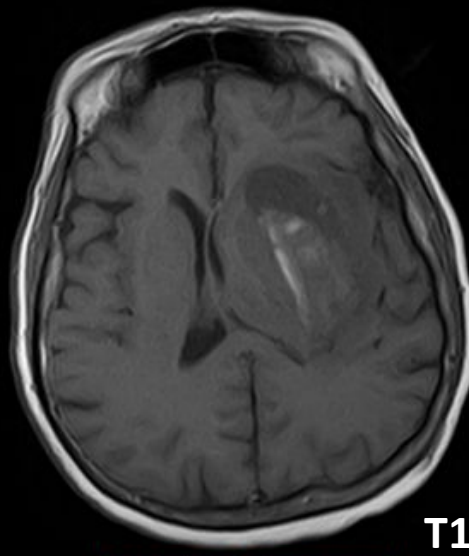
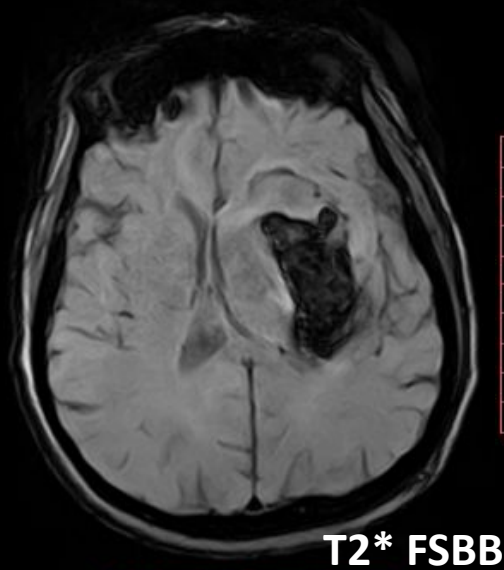
CT



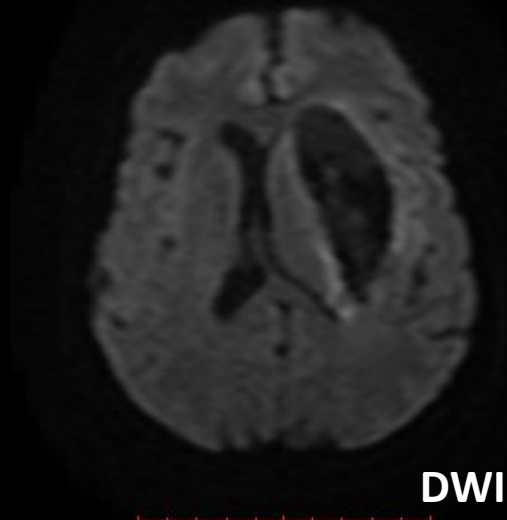
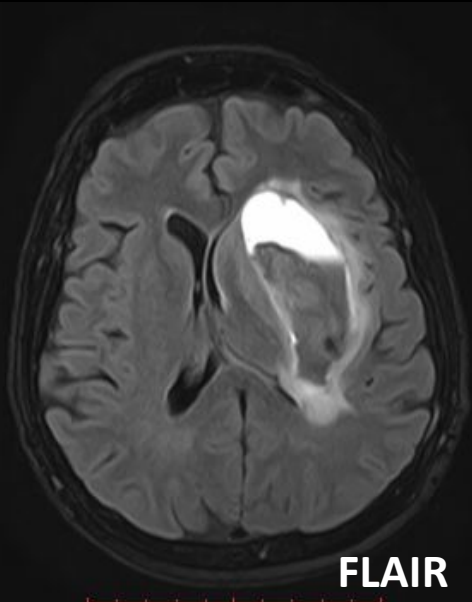
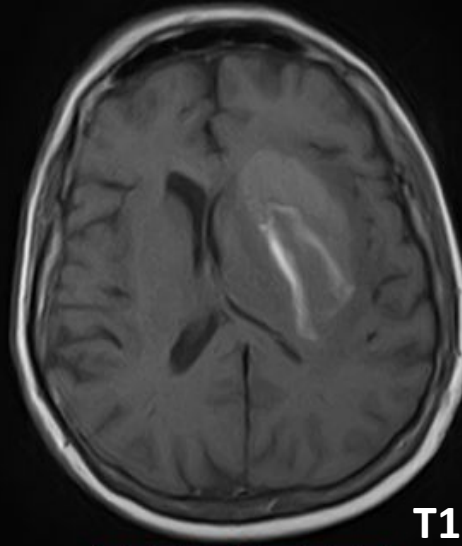
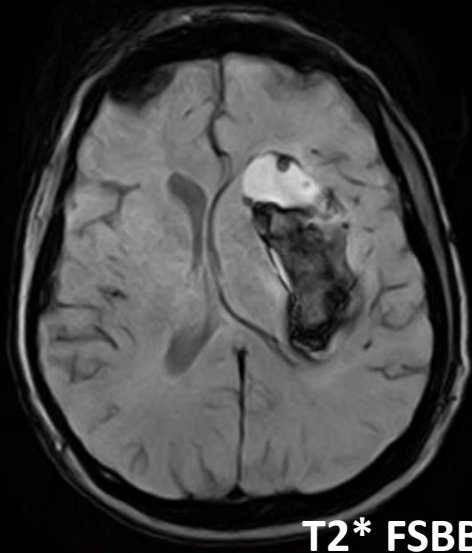
КТ9.10.2015 2 часа после начала



МРТ 13.10.2015 4 сутки

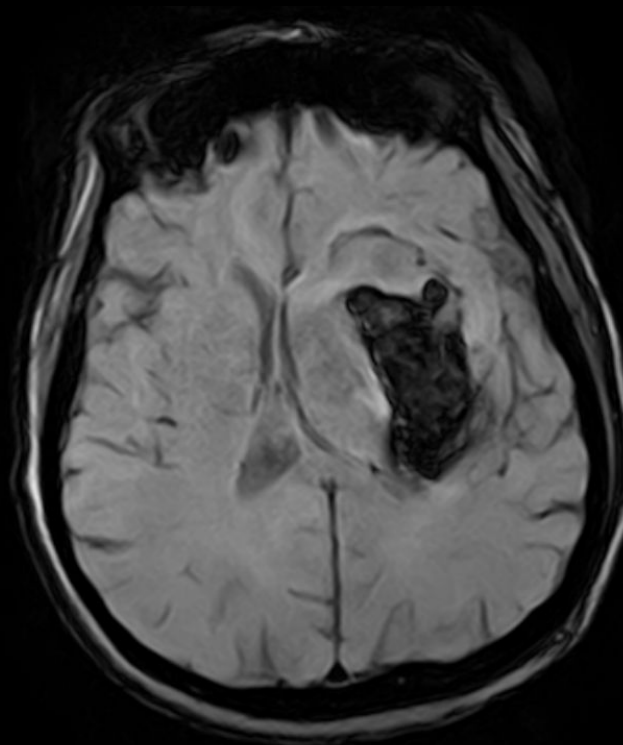


МРТ 15.10.2015 6 сутки

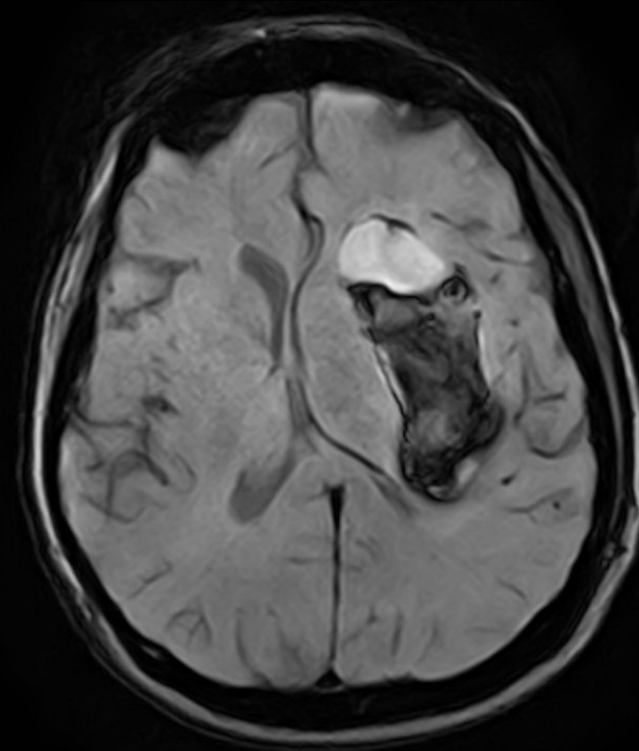




KT 2ч



T2* FSBB 4cyt



T2* FSBB 6cyt