Infarct core

- The part of an acute ischemic stroke which has already infarcted, or is irrevocably destined to infarct regardless of reperfusion.
- It is also referred as established infarct and is in distinction from the penumbra which remains potentially salvageable.

Infarct

- Time to peak is ALWAYS prolonged
 - We use MTT and TTD, which are equivalent.
 - Look at MTT and TTD for defect (they are increased)

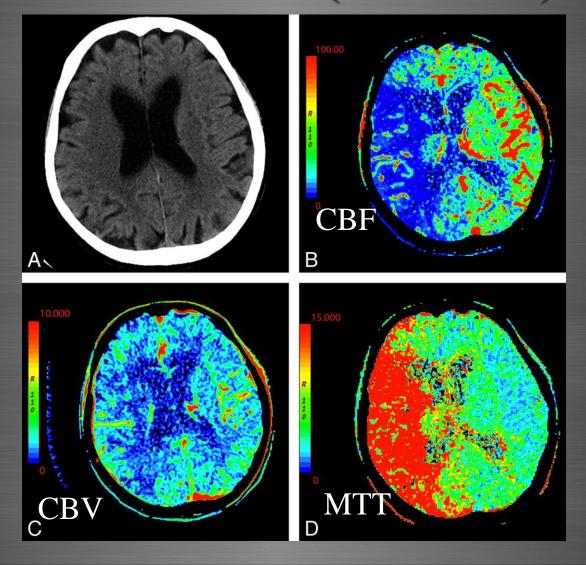
CBF

- Flow is usually prolonged, but not always.
- Pressure and resistance adaptations may be so effective as to keep flow at or near baseline.
- Ischemic penumbra will have only moderately decreases CBF and normal or even increased CBV due to autoregulation.

CBV

- Not as intuitive
- Volume that's measured is NOT volume of blood, but rather volume of contrast bolus over defined measurement time.
- Volume of blood in dead brain is high, but as the area has no inflow, no contrast gets in, and so measured volume is low.
- \blacksquare CBV = MTT = TTD = infarct

Right MCA Infarct CBV = MTT (matched)



Basal ganglia infarct

