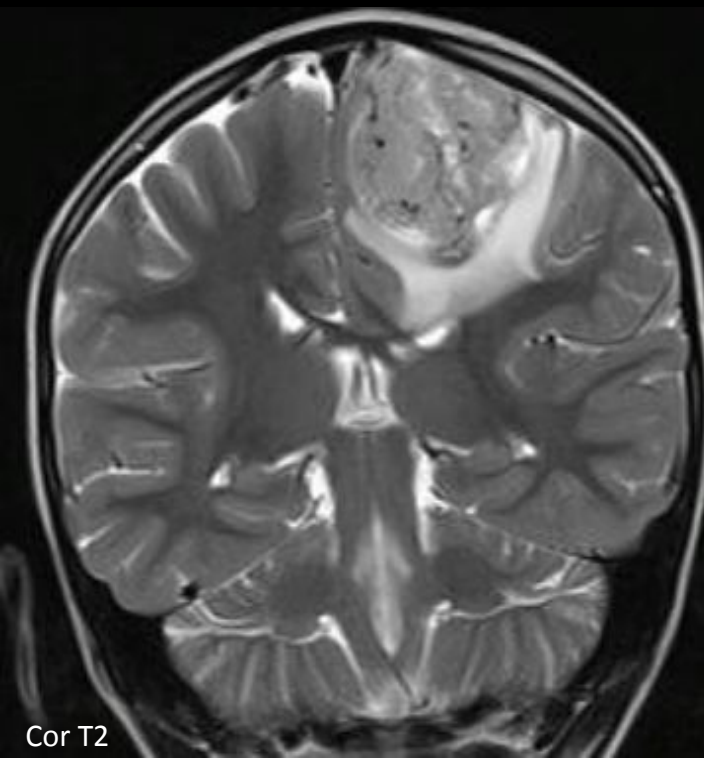


# PRIMARY BRAIN SARCOMA IN THE PEDIATRIC POPULATION: SPECTRUM OF CT AND MRI FINDINGS OF A RARE TYPE OF TUMOR

1 **Supratentorial** and **peripheral** are the most frequent locations



Cor T2

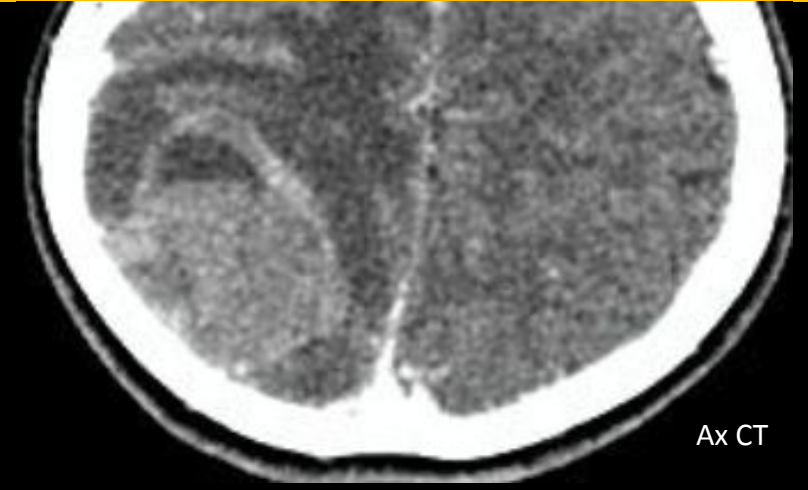
Parasagittal location



Sag CT

Anterior frontal location

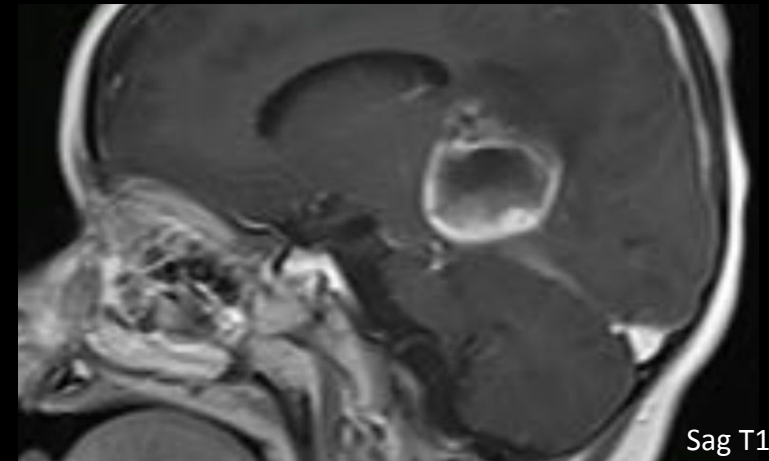
Both are of **supratentorial** location



Ax CT

**Peripheral** location: At the cortical-subcortical junction

... rarely, it can have a midline location



Sag T1 + Gad

2

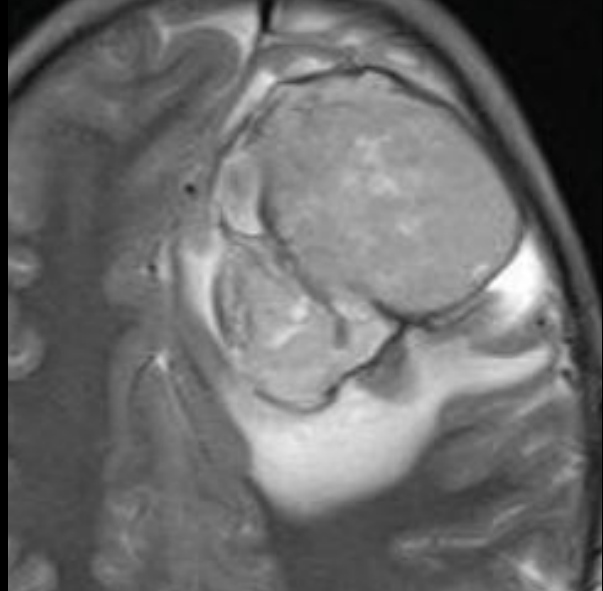
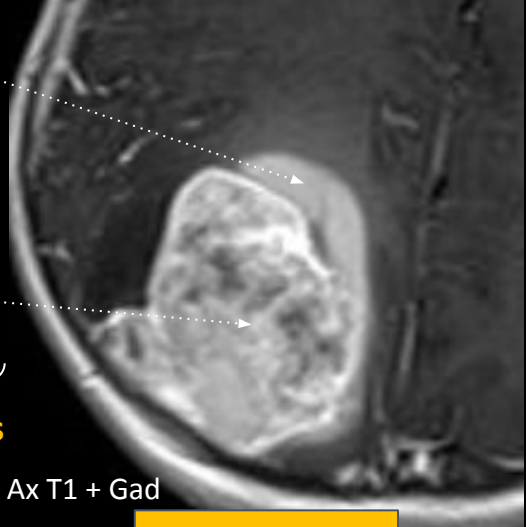
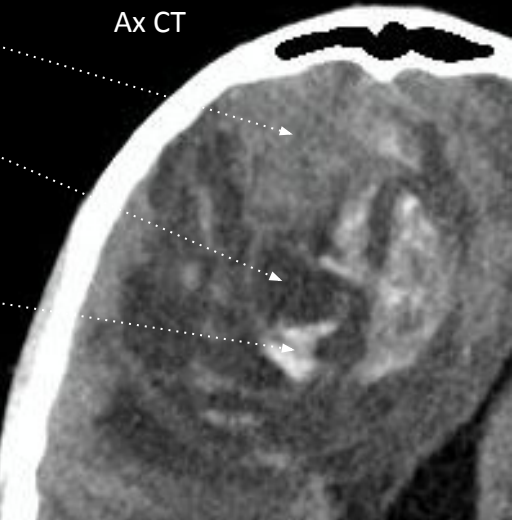
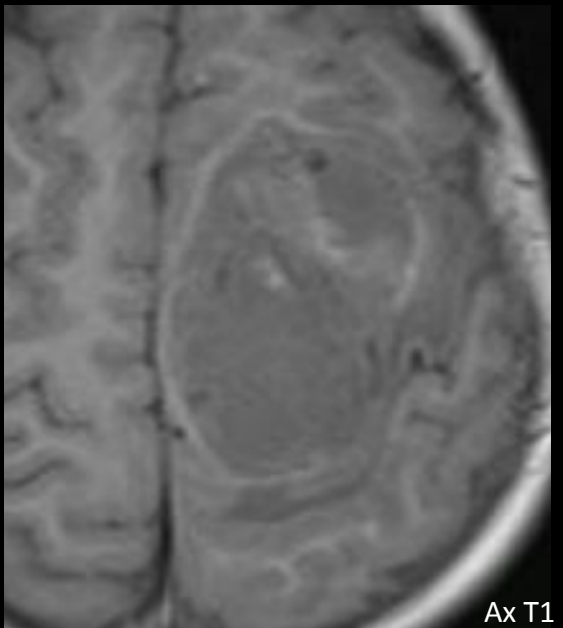
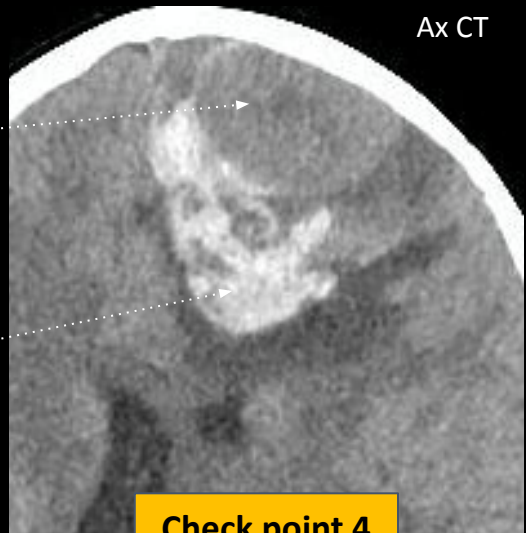
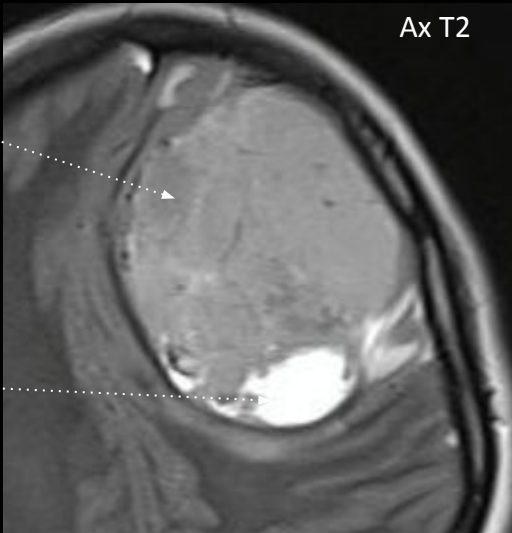
**Heterogeneous appearance** with

solid and cystic component  
(and also hemorrhagic component!)

but...

3

with **well-defined margins**



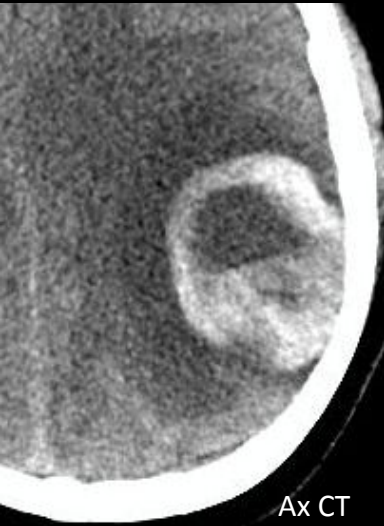
4

# Hemorrhagic component is a major imaging feature of brain sarcomas

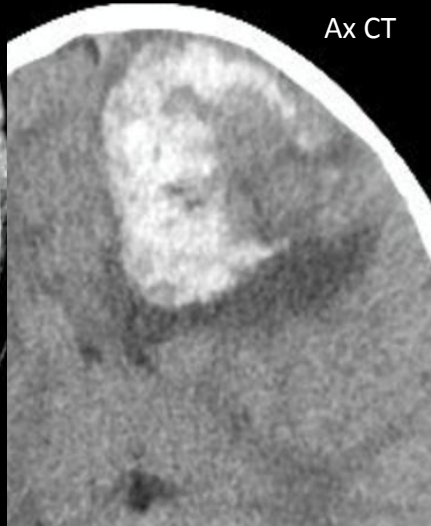
Most frequently present as:  
**Intralesional hemorrhage**

But also: **Hemosiderin border**

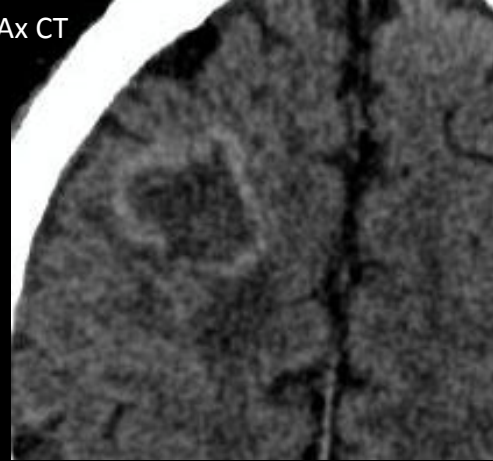
... so, it can present as **intracranial bleeding** in a pediatric patient



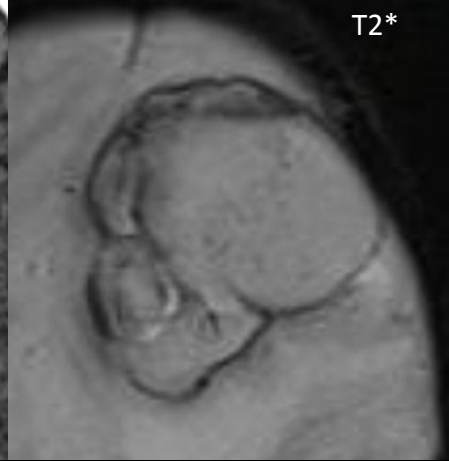
Ax CT



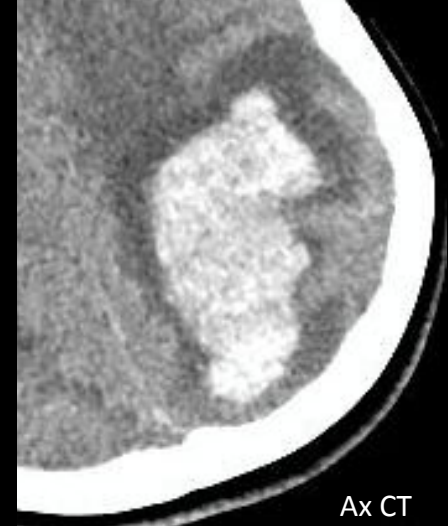
Ax CT



Ax CT



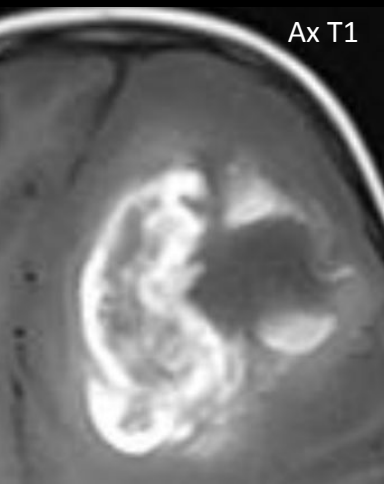
T2\*



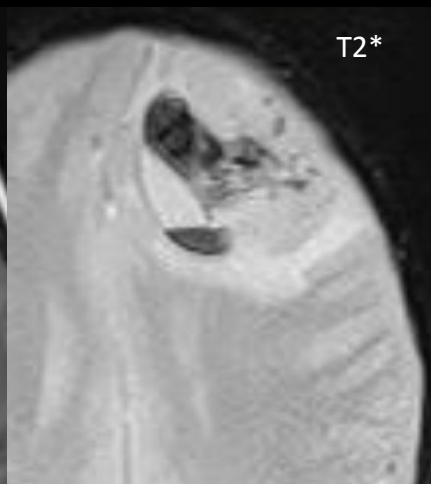
Ax CT

Brain sarcoma presenting as intracranial hematoma

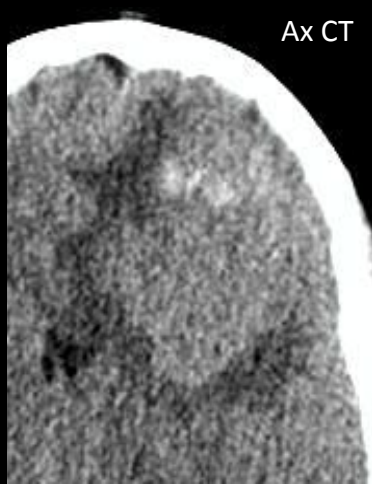
And: **Micro-hemorrhagic component**  
(T2\* sequences are very useful)



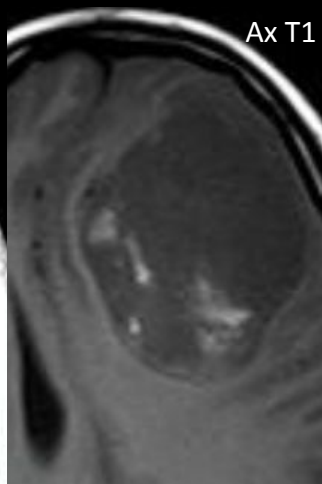
Ax T1



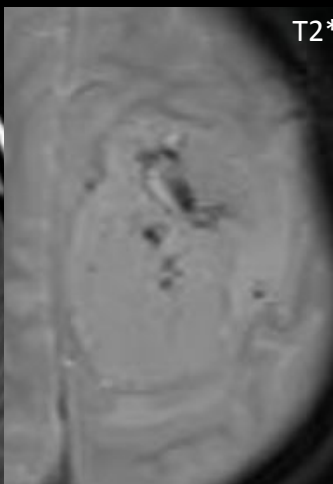
T2\*



Ax CT



Ax T1



T2\*



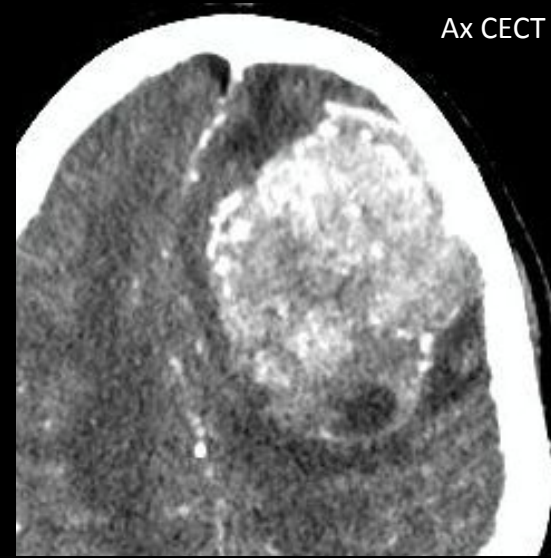
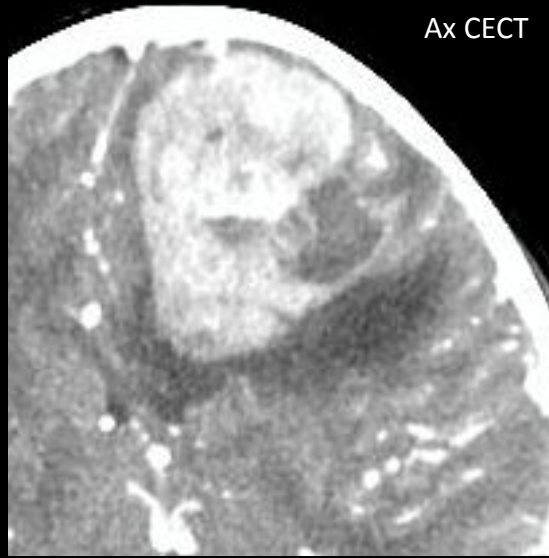
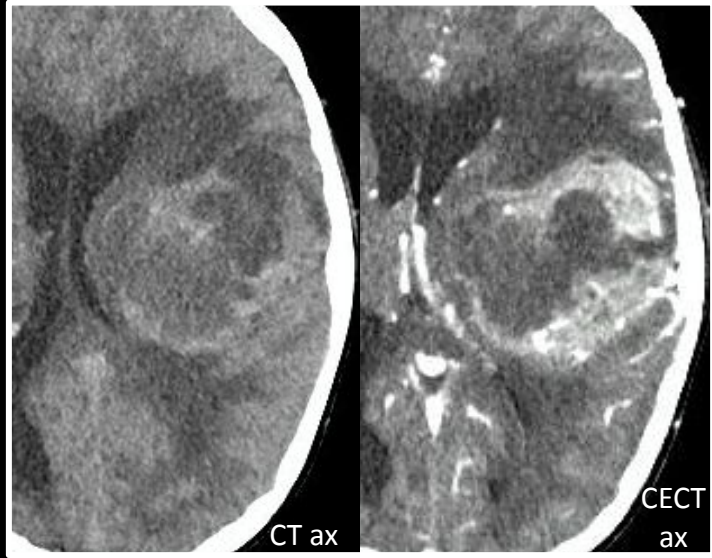
Ax CT

It can even have subarachnoid extension (intra-ventricular)

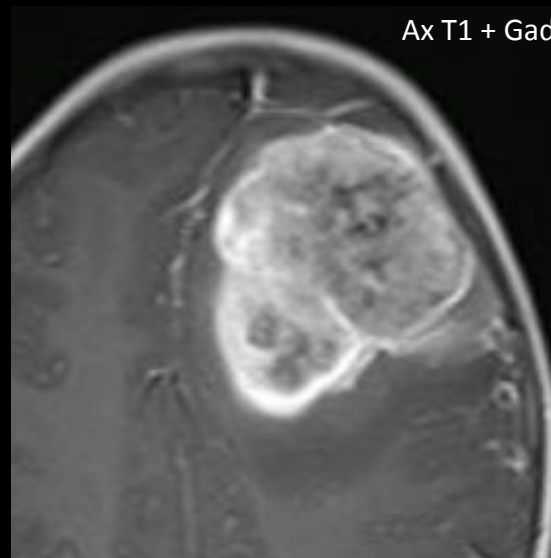
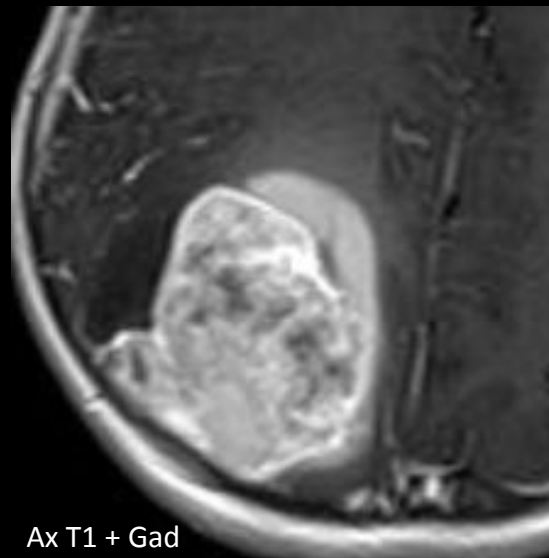
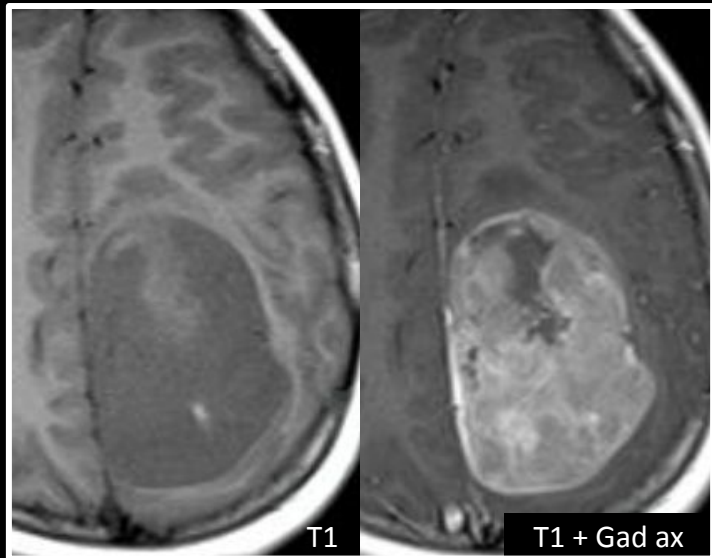
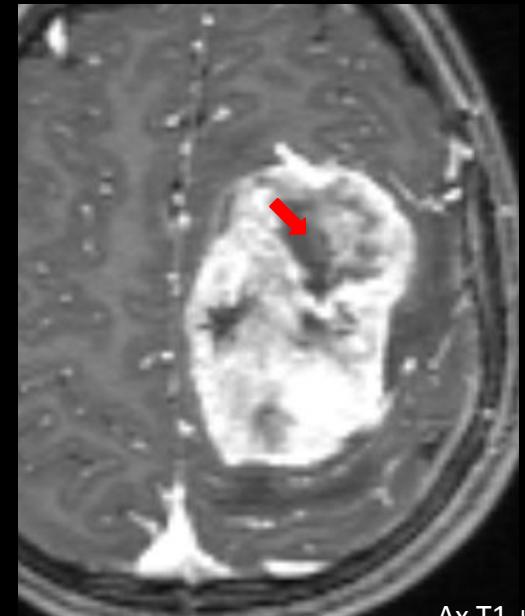


5 **Heterogeneous enhancing** lesion

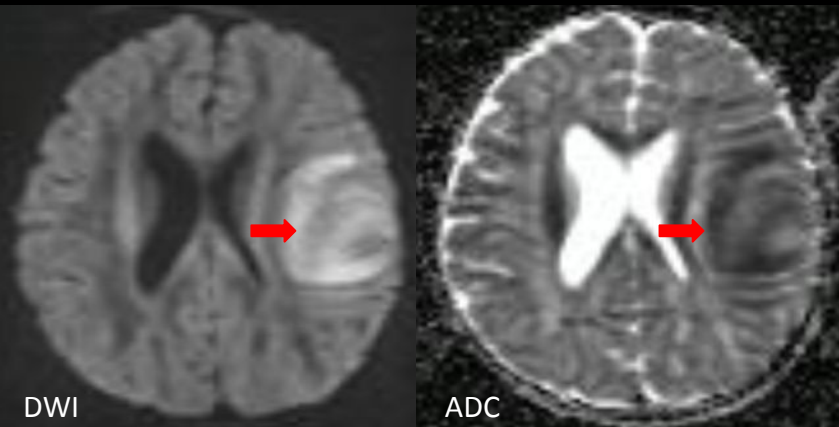
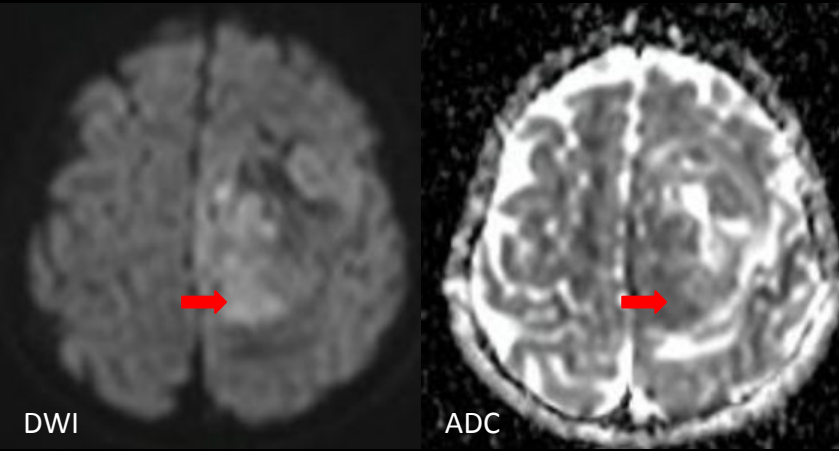
Because of its various type of components, brain sarcomas shows heterogeneous enhancement with **avid enhancement of the solid component**



6 ... with **scattered necrotic and cystic components**

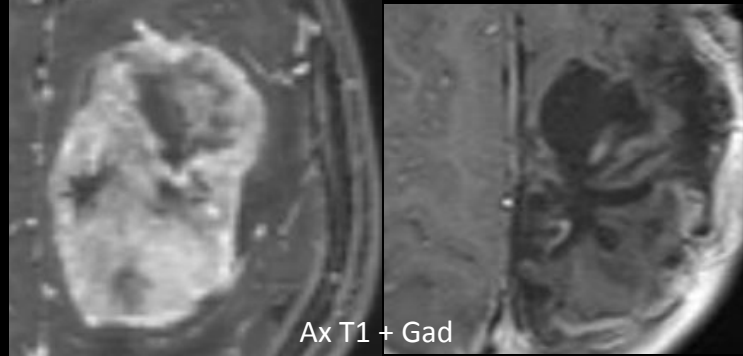


# Other features: Mild restricted diffusion



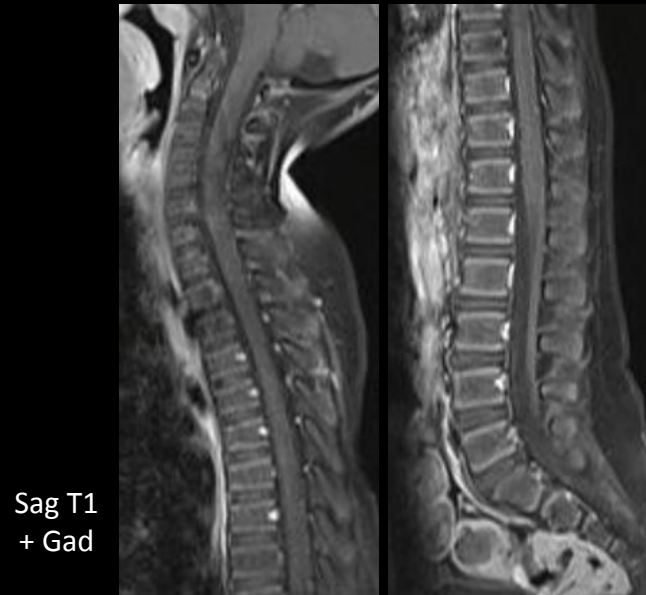
# Evolution

Recurrence is very rare in brain sarcomas



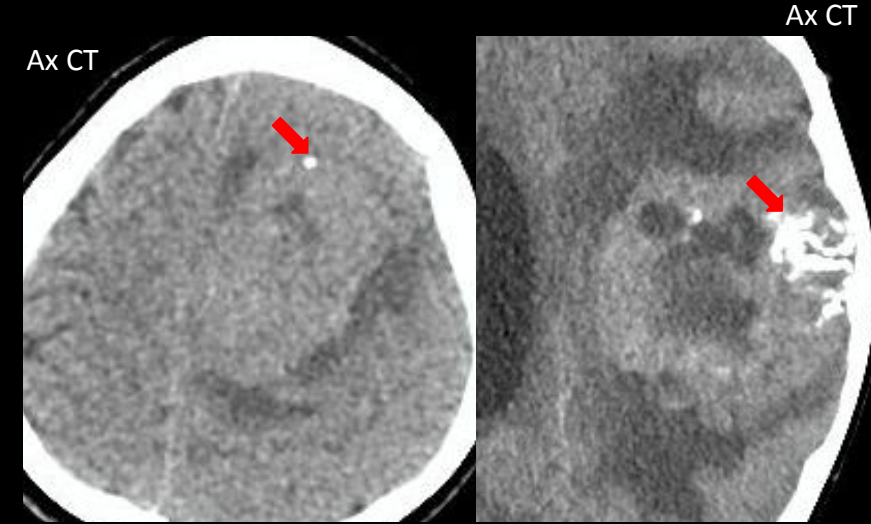
**No recurrence**

Leptomeningeal spread is also unusual



**No evidence of leptomeningeal spread**

# Unusual imaging features: Calcifications



# Poor enhancement

