**Cerebellar lesion (by common)**

1- most common trauma in RTA
2- fracture of posterior cranial fossa
3- demyelination (MS "young age and female")
4- tumor in posterior cranial fossa or in the cerebellam it self (very rare but meningioma is common)
5- PICA occlusion
6- Degeneration (multiple system atrophy)
7- Paraneoplastic syndrome (female 60 year old with ovarian cancer loss of weight MRI brain normal)
8- Abcess
9- Space occupying lesions (tumor, abcess, TB, metastises to cerebellum)
10- Medication (phynetoin- alcholoism)
11- Maby rare in celiac disease
12- Lung cancer with MRI lesion visible (matastisis)
13- Parkinsonial and cerebellum signs (multisystem)
14- Ischemia

**Examination:**

HIPDRSAN

1- Hypotonia (upper: flex and extend elbow then rotate wrist and shoulder) both sides
2- Intentional Tremors "during movements" (touch my finger the touch the chest with patient index "finger nose test" and change my finger location each time)
3- Past pointing (dysmetria like finger nose test "finger chest test")
4- DDK (rapid alternating movement)
5- Rebound phenomena (extend fully arm then ush arm down and the patient arm will bounce upward)
6- Stakato speech (greet patien then see if he respond, tell him to read quraan "he don't know when to stop and wrong tone maby high voice")
7- For LL: Ataxia (do not do it except if the examiner said do it) wide base gate but when he fall he will fall on the affected side (ipsilateral)
8- Nystagmus (finger in middle the the patient follow your finger to the lateral of patient face) horizontal nystagmus
9- For LL: heal to shin exam (cannot do it while eyes closed or open but if cannot do it only in closed eye then it is sensory ataxia not cerebellar)
10- Never do Romberg test in this patient because he will fall anyway

*Question case: Patient with abnormal speech, tremor (but the patien was sitting with no tremors) then it is a cerebellum case .. tendency to fall

*Always stay on the right of the patient and examine both sides

*when adductors stronger than abductors (scissoring gait) it is UMNL