

# Cerebellar Disease Focussed Examination

NB. the instructions may be non-specific e.g. Examine this patient with a tremor (may be Parkinson's or cerebellar) or examine this patient neurologically. In this case, approach by asking a few focussed questions and finding out which type of tremor/condition is present and then proceed with the relevant focussed examination to elicit all the signs of the condition.

## Introduction

Wash hands, Introduce self, ask Patients name & DOB & what they like to be called, Explain examination and get consent

## General observation

### General

- e.g. wheelchair (MS), neurological signs, posture, signs of neglect (alcohol)

### Gait (walk with them in case they fall)

- Sit in chair to stand with arms folded (**truncal ataxia**)
- Walk away then heel toe if possible while walking back (**ataxic gait**)

### Posture

- Stand with feet together
- Romberg's test if steady: ask patient to close eyes and assess stability (**sensory ataxia**)

NOW...work down the body

## Face

### Face

- H test for extraocular muscle function and pause at lateral gaze (**nystagmus; saccades**)
- Look from one target to another (**hypometric saccades**)

### Speech

- Say "West register street" and "baby hippopotamus" and "british consitiution" (**slurring; staccato i.e. jerky speech**)
- Tongue: move side to side

## Focussed Upper limbs

- Pronator drift: Ask patient to hold arms out fully extended with palms facing upwards and close their eyes (**pronator drift = weakness; upward drift = cerebellar lesion**).
- Rebound test: while patient's arms still held up, push patient's wrists down briskly and then quickly let go (**accentuates upward cerebellar drift**)
- Hypotonia
- Coordination
  - Finger-nose test (**Intention tremor and dysmetria**)
  - Hand slapping (**dysdiadokinesis**)

## Focussed Lower limbs

- Hypotonia
- Coordination (heel-shin test)

## To complete

- Fundi for papilloedema (**space occupying lesion**)
- Full neurological exam
- Examine CN 5, 7, 8 to exclude cerebellar-pontine lesion
- Summarise and suggest further investigations you would do after a full history

### Focussed questions

What happened when you first presented with this condition?  
 How is it affecting you?  
 When is your tremor worst?  
 Do you have other problems, such as problems with balance or co-ordination?  
 Do you have problems with buttons and shoe laces?  
 Turning over in bed at night?  
 Getting in and out of your car?

### Examining for tremor

- Resting (rest hands on lap and close eyes and count down from 20) e.g. Parkinson's
- Postural tremor (hold arms out) e.g. benign essential tremor; drugs (salbutamol), hyperthyroidism
- Action tremor (finger nose test) e.g. cerebellar

CAUSES= vascular lesion at brainstem, Friedreich's ataxia, alcohol, space occupying lesion, demyelinating lesions, Phenytoin (note gum hypertrophy).  
 Midline lesion = gait and truncal ataxia. Hemisphere lesion = ipsilateral signs

SIGNS=  
 Dysdiadochokinesis  
 Ataxia/dysmetria  
 Nystagmus  
 Intention tremor  
 Slurred/staccato speech  
 Hypotonia

PAST pointing  
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