

Neurological Examination of the Lower Limbs Cheat Sheet by hjsdhaj via cheatography.com/201639/cs/42746/

Preperation and Equipment:		
W	Wash Hands	
I	Introduce Yourself + Patient's Identity	
Р	Permission	
Р	Patient Position + Pain	
Е	Explaination	
	Patient must be placed at 45° and limbs exposed	

Equ	ipm	en	t:

Cotton Wool Neurotips **Tendon Hammer** 128Hz Tuning Fork

General Inspection:

- ·Postural abnormalities and deformities
- ·Leaning or facial asymmetry
- ·Muscle wasting, fasciculations, or tremor
- Abnormal movements
- ·Obvious discomfort or pain
- ·Medical paraphernalia: Walking aids, Calipers

-	
	ne:

Tone:		
	Check for pair	1
Check tone:	Roll the relaxed leg from side to side and watch foot	Extra movement => Decreased tone Less movement => Rigidity
	Flex and extend knee	+ check for clonus at knee
Check for clonus:	Rotate ankle	Ensure no pain Relax foot Hold lower leg with one hand and extend the ankle joint with the other Suddenly dorsiflex ankle and hold in position Compare with other leg

Clonus is seen in upper motor neuron lesions

Power:

Test both left and right limbs, directly comparing each movement in

The patient should perform each movement on their own and then

;	attempt with the e	examiner resisting the movement
Hips:	•Flexion •Abduction •Adduction •Extension	Patient straightens leg, raises leg off the bed, lowers it to the bed
Knee:	•Flexion •Extension	Patient flexes hip and knee, secure thigh with one hand, ask patient to kick out towards the end of the bed, pull in heel towards bum
Ankle:	•Dorsiflexion •Plantarflexion	Leg flat on bed, secure leg, dorsiflex foot, plantarflex foot
Big Toe:	•Flexion •Extension	Hold foot secure, flex big toe (towards patient), extend (away from patient)

Coordination:

Heel-shin test: Place heel on one knee and run up and down the

Toe Tapping: Patient taps floor/your hand with their foot

Must be completed for both sides and the patient should be asked to perform the actions as quickly as possible

Tendon Reflexes:

Limb must be totally relaxed	
------------------------------	--

Knee: Support the leg above the knee, with the knee L3/4

flexed, strike directly below the patella

Ankle: Leg flat on the bed, laterally rotate leg, flex knee, hold the foot dorsiflexed. Strike Achilles Tendon



By hjsdhaj cheatography.com/hjsdhaj/ Not published yet. Last updated 10th April, 2024. Page 1 of 3.

Sponsored by CrosswordCheats.com Learn to solve cryptic crosswords! http://crosswordcheats.com

S1/2



Neurological Examination of the Lower Limbs Cheat Sheet by hjsdhaj via cheatography.com/201639/cs/42746/

Tendon Reflexes: (cont)			
Plantar	Hold ankle with one hand.	Must be first	
Response:	Warn the patient this may	movement of the big	
	tickle.	toe	
	Scratch the sole of the foot		
	with a tongue depressor,	Negative Babinski sign	
	starting at the lateral side of	(normal except in the	
	the heel, up lateral sole,	case of LMN disease):	
	across base of toes.	Flexion of the toes and	
		pull away	
		Positive Babinski sign:	
		Extension (upwards	
		movement) of the toes	
		Indicates UMN	
		damage	

Muscle may just contract, may not be an obvious movement

Reflex may be present/absent, or reduced/brisk

Sensation:		
Light Touch:	Important to touch rather then stroke	
	Lightly touch sternum first using cotton wool.	
	Ask patient to close eyes and tell you when they fee	l
	the touch.	
	Ask if touch feels the same on both sides	
	Proximal anterior upper thigh	L1
	Proximal anterior upper leg, between thigh and knee	L2
	Anterior surface of knee	<i>L3</i>
	Medial aspect of lower leg	L4
	Lateral aspect of lower leg	L5
	Lateral side of foot/small toe	S1
	Posterior vertical midline of leg	S2

Sensation: (cont)		
Pain:	Repeat same process as for light touch.	
	Tested using a new neurotip.	
	Must be disposed of in the sharp	s bin.
Temperature:	Tested the same way as pain/lig done.	ht touch, rarely
	Tested using a cold tuning fork.	
Vibration Sense: (128Hz)	Strike tuning fork and hold to patient's sternum. Ask patient to close eyes.	
	Begin on most distal bony promi each foot)	nance (Big toe of
Proprioception:	Ask patient to close eyes. Hold big toe at the sides, distal to the DIP joint. Stabilise the toe proximal to the tested joint.	If normal, end here. If patient is unable to feel, move proximally up the joints.
	Demonstrate up/down for the patient, then repeat in a random direction, asking the patient to say which direction the toe is moving.	PIP, Ankle, Knee, etc.
	Repeat 3 times	
Gait and Balance	:	
Examine Gait:		
Examine Balance	Patient stands with their feet their eyes.	together and close



By **hjsdhaj** cheatography.com/hjsdhaj/ Not published yet. Last updated 10th April, 2024. Page 2 of 3. Sponsored by CrosswordCheats.com Learn to solve cryptic crosswords! http://crosswordcheats.com

If they become unsteady -> Positive test



Neurological Examination of the Lower Limbs Cheat Sheet by hjsdhaj via cheatography.com/201639/cs/42746/

Completing the Examination:

Thank the Patient

- •Consider Upper Limbs Examinaiton
- •Consider Cranial Nerves Examination
- •Consider Examining Anal Tone

Wash Hands

Common Disorders

B12 deficiency: Commonest cause of dorsal column problems -

sub acute combined degeneration of the spinal

cord

Cerebellar disease is ipsilateral and causes horizontal nystagmus -

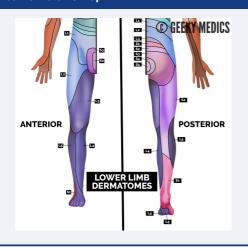
Fast phase towards the side of the lesion

MRC Muscle Power Scale:

MRC Muscle Power Scale

Score	Description
0	No contraction
1	Flicker or trace of contraction
2	Active movement, with gravity eliminated
3	Active movement against gravity
4	Active movement against gravity and resistance
5	Normal power

Lower Limbs Dermatome Map:





By **hjsdhaj** cheatography.com/hjsdhaj/

Not published yet. Last updated 10th April, 2024. Page 3 of 3. Sponsored by CrosswordCheats.com Learn to solve cryptic crosswords! http://crosswordcheats.com