AN INTERESTING CASE REPORT OF BRICK KLIN WORKER PALSY

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INTRODUCTION

Compression of peripheral nerves causes various mononeuropathies.

Compression neuropathy of the common peroneal nerve (CPN) at the fibula head is the most common type occurring in the lower limb .

A prolonged squatting posture is one cause of this type of compression neuropathy in the CPN , but there has been little research in the working environment.

Here, we report a brick klin worker who presented with left CPN palsy following prolonged squatting posture in a confined space.

CASE DETAILS

35 years old female presented with complaints of **dragging of left foot while walking and inability to clear the left foot off the floor** for past 3 days .

C/O **numbness in lateral aspect of left leg and dorsum of the left foot for past 3 days.**

No H/O buckling of knees while walking & no H/O difficulty in getting up from squatting position/sitting position.. No H/O saddle anesthesia. No H/O any complaints in both upper limbs. No H/O bowel and bladder disturbance. No H/O low back ache /pain or pain radiating from lower back to thigh. No H/O trauma ,fever and surgery in the recent past.

Patient had **significant h/o prolonged squatting at her work place in brick klin**[12 hours for 3 days]

On Examination, patient general condition was normal,

HMF &CRANIAL NERVE EXAMINATION - Normal,

SPINOMOTOR EXAMINATION - DISTAL HYPOTONIA IN LEFT FOOT,LEFT ANKLE DORSIFLEXION &EVERSION POWER OF 1/5,plantar flexion &inversion was absolutely normal

Left knee & hip power was normal,

SENSORY EXAMINATION - REDUCED PAIN&TEMPERATURE SENSATION IN LEFT LATERAL SIDE OF LEG&IN DORSUM OF LEFT FOOT.

Romberg sign negative. No cerebellar signs.

DIAGNOSIS

Patient evaluated further , basic blood investigations were found to be normal.

- ESR/CRP normal .
- ANA ANCA ,RA factor normal.
- TFT normal.
- NCS of both lower limb revealed gross reduction of CMAP amplitude in left common peroneal nerve .
- MRI LS SPINE was normal.

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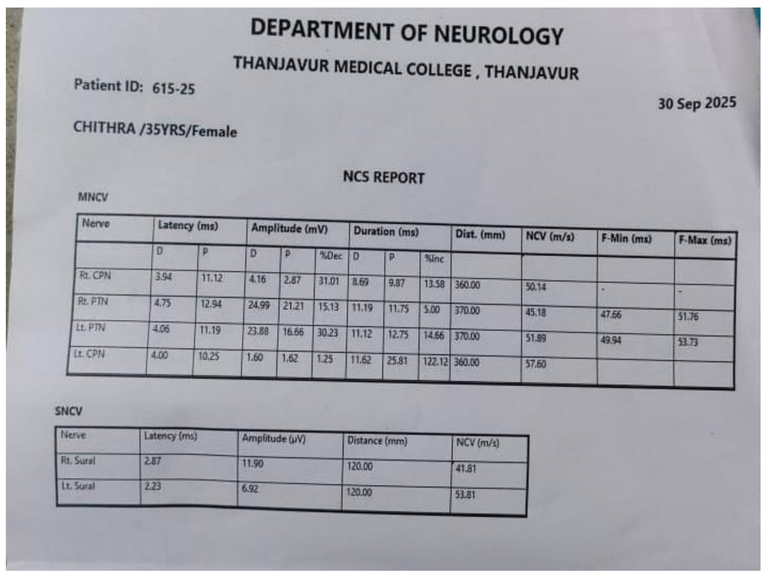
CONFIRMATION



DEPARTMENT OF NEUROLOGY

THANJAVUR MEDICAL COLLEGE , THANJAVUR

Patient ID: 615-25

30 Sep 2025

CHITHRA /35YRS/Female

NCS REPORT

MNCV

Nerve	Latency (ms)		Amplitude (mV)			Duration (ms)			Dist. (mm)	NCV (m/s)	F-Min (ms)	F-Max (ms)
	D	P	D	P	%Dec	D	P	%Inc				
Rt. CPN	3.94	11.12	4.16	2.87	31.01	8.69	9.87	13.58	360.00	50.14	-	-
Rt. PTN	4.75	12.94	24.99	21.21	15.13	11.19	11.75	5.00	370.00	45.18	47.66	51.76
Lt. PTN	4.06	11.19	23.88	16.66	30.23	11.12	12.75	14.66	370.00	51.89	49.94	53.73
Lt. CPN	4.00	10.25	1.60	1.62	1.25	11.62	25.81	122.12	360.00	57.60		

SNCV

Nerve	Latency (ms)	Amplitude (µV)	Distance (mm)	NCV (m/s)
Rt. Sural	2.87	11.90	120.00	41.81
Lt. Sural	2.23	6.92	120.00	53.81

DISCUSSION

- The fibula head is the most common site of compression neuropathy in the CPN because the nerve runs superficially at this site .
- Several postures, such as crossing of the legs, Sitting and lying down, cause compression neuropathy at the fibula head in the CPN .
- Prolonged squatting postures also induce this type of compression neuropathy.
- In working environments, squatting-induced CPN neuropathy has been reported in harvesting farm workers but little is known about this type of neuropathy in other Occupations[brick klin worker]
- NCS is a useful tool to determine the pathophysiology and the location of compression neuropathy .
- In our patient, the first NCS showed reduction of both proximal and distal CMAP Amplitude indicated LEFT COMMON PERONEAL AXONOPATHY. There is no conduction block.

TREATMENT

Patient was managed conservatively with low dose steroids and intense physiotherapy.

Advised her to change her occupation and not to squat for prolonged period in any other occupation.

After 3 months of follow up,in spite of intense physiotherapy residual weakness[left dorsiflexion] was present.

Patient advised to continue physiotherapy and advised plastic surgery follow up.

CONCLUSION

- Prolonged squatting posture in a confined space can cause acute compression neuropathy at the fibula head in the common peroneal nerve.
- It is important to consider compression neuropathy in confined space workers
- Creating awareness of those workers will prevent long term disability

AUTHOR INFORMATION

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