



NEURO TOUCH™

HEALTHCARE TECHNOLOGY OF THE FUTURE

# NEURO TOUCH

## THE FUTURE OF DPN DIAGNOSIS



### Diabetic Peripheral Neuropathy (DPN)?

Diabetic Peripheral Neuropathy (DPN) is a condition where damage to the peripheral nervous system due to long-term diabetes results in loss of sensation at the extremities usually in the feet. Common symptoms of DPN are numbness, tingling or burning sensations, extreme sensitivity to touch, insensitivity to hot and cold temperatures, sharp pain, muscle weakness, and loss of balance or coordination. If not detected early, it could make the patient prone to diabetic foot ulcers and can lead to amputation. DPN in the foot can be prevented by early diagnosis if the diabetic patients are screened for symptoms.

### Did You Know?

- 01 According to the International Diabetes Federation (IDF), 463 million people have diabetes in the world.
- 02 Diabetes is a growing challenge in India with an estimated 8.7% diabetic population in the age group of 20 and 70 years.
- 03 An estimated 60-70% of Diabetics suffer from peripheral neuropathy.
- 04 Undermanaged DPN is the number one cause of non-traumatic lower-limb amputations in the world.
- 05 More shocking is the fact that 75% of amputations are preventable.



Dr. CONSULTING DOCTOR  
QUALIFICATION

CLINIC NAME  
CLINIC ADDRESS

CONTACT: 9876543210

NAME: **PATIENT NAME**

CONTACT: **0987654321** DOB: AGE: 52

TEST DATE: **03/Dec/2018 11:57**

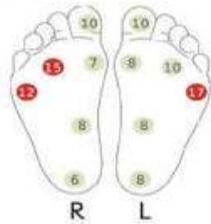
PATIENT ID: **104**

GENDER: **F**

## OVERVIEW

Diabetic Peripheral Neuropathy is the most common cause leading to foot ulceration, and can result in limb amputation. Diabetic patients are recommended to undergo comprehensive foot examination annually. In case of abnormal test results, patients are recommended to undergo a comprehensive foot assessment at least once in 3 months. If a patient is diagnosed with Peripheral Neuropathy, the patient's feet need to be inspected daily for corns, calluses, cuts, blisters, sores, signs of infection and changes in colour or temperature of the skin. It is recommended the patient consults the doctor immediately if any of the above signs are noticed.

## RESULTS



### MONOFILAMENT

**High Risk**

**Low Risk:** Tactile sensation is felt using a 10gram monofilament at Hallux, 1st, 3rd, and 5th Metatarsal Heads bilaterally.

**High Risk:** Value greater than 10 grams at any one of the 4 points - Hallux, 1st, 3rd, and 5th Metatarsal Heads.



### VIBRATION PERCEPTION

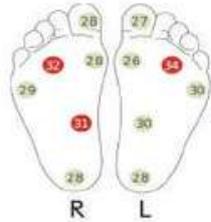
**High Risk**

**Low Risk:** Vibration detected below 15V.

**Intermediate Risk:** Vibration detected between 16V to 24 V at any one of the test points.

**High Risk:** Value detected above 25V at any one of the test points.

Reference - International Diabetes Federation. Clinical Practice Recommendation on the Diabetic Foot: A guide for healthcare professionals: International Diabetes Federation, 2017.

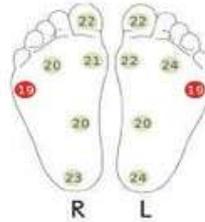


### HOT PERCEPTION

**High Risk**

**Low Risk:** A perceived increase in temperature of up to 5°C from the ambient temperature.

**High Risk:** Failure to perceive the increase in temperature.

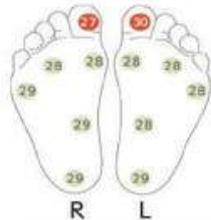


### COLD PERCEPTION

**High Risk**

**Low Risk:** A perceived decrease in temperature of up to 5°C from the ambient temperature.

**High Risk:** Failure to perceive the decrease in temperature.



### SKIN TEMPERATURE

Localized increase or decrease in temperature of more than 2° C in comparison with a similar anatomical area in the other foot/limb may signify inflammation/infection or vascular insufficiency; which needs to be clinically correlated

## RECOMMENDATION

Consult your doctor for further evaluation

Ambient Temperature: **25 °C**

## NOTES

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## FURTHER INVESTIGATIONS

- FOOT SCAN (PLANTAR PRESSURE SCAN)
- VASCULAR ASSESSMENT
- FOOT BIOMECHANICAL ASSESSMENT

Dr. CONSULTING DOCTOR  
QUALIFICATION

## NEURO TOUCH - DPN DIAGNOSIS MADE EASY

NEURO TOUCH is a point of care, battery-powered, multi-parameter diagnostic device that enables doctors to screen for symptoms of Diabetic Peripheral Neuropathy (DPN).

NEURO TOUCH combines the function of 5 different neuropathy screening devices into one handheld and portable tool and can be used in any healthcare setting - clinic, camp, hospital, home care, etc. It is integrated with the smartphone-based NEURO TOUCH app that produces insightful reports. Since the test data is securely stored on the cloud and can be retrieved at anytime, anywhere it helps in continuous tracking of the patient's condition.



### Transforming Neuropathy Diagnostics With NEURO TOUCH you can perform,

- Graduated Monofilament Test (Protective Sensation Test)
- Vibration Perception Test
- Hot and Cold Perception Test
- Infrared Thermometry for Skin Temperature Measurement
- Generate instant screening reports
- Store, collate & analyze the data.

# WHY NEURO TOUCH?

Parameters	NEURO TOUCH	Existing Solutions
Symptom checker	Comprehensive Neuropathy Evaluation Hand-Held Device that enables multiple tests (5 in 1)	Separate machines required for different tests
Ease of use	Easy to manage immediate results	Difficult to manage, trained high-cost Healthcare workers required
Portability	Portable	Heavy and bulky
Digitization	Integrated into EMR for seamless data flow and continuous tracking of Neuropathy progression and outcome	Difficult to integrate into EMR. Does not enable repeat tracking
Accuracy	Highly accurate reliable and consistent reports to facilitate intervention	Low levels of accuracy
Pricing	Economical	Expensive



We have done the clinical user study and clinical validation of NEURO TOUCH device. The device has helped screen over 1000 patients in our clinic till date and is very helpful in assessing the neuropathic condition in the foot.  
-Dr. G Arun Maiya, Diabetic Foot Clinic

I've been using NEURO TOUCH device from last 15 months for screening patients with Diabetic Peripheral Neuropathy. It is a hand-held device and makes screening uncomplicated. We at Lopamudra Medical Centre have screened over 1000+ patients till date. The NEURO TOUCH device is completely wireless and makes it exceptional from the other devices.



-Dr. Amit Nanaiah, Diabetologist



It has been a complete transformation in handling the screening of Diabetic Neuropathy once we started with NEURO TOUCH. It is a 4 in 1 solution for all tests required. The fact that it is portable makes it easy for usage in our Dept. of Podiatry  
-Dr. Pavan Belehali, Podiatric Surgeon

**Together we bring information, resources and hope to those suffering from Diabetic Peripheral Neuropathy**



**Call now on +91-91083 58538 for a free demonstration of NEURO TOUCH**