

SUDOSCAN

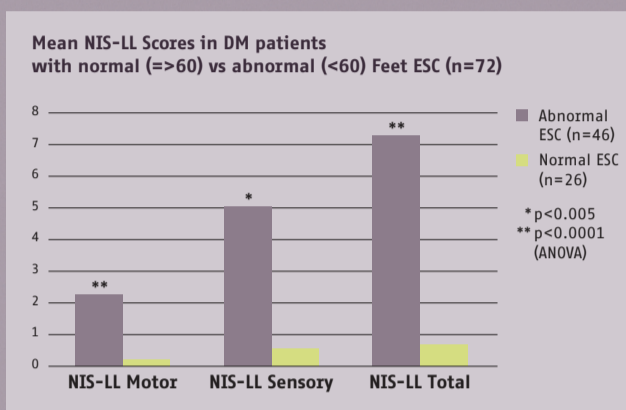
A **NEW** TOOL FOR ASSESSING AUTONOMIC NEUROPATHY

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SUDOSCAN IS A SENSITIVE TOOL TO DETECT DIABETIC NEUROPATHY

> SUDOSCAN correlated with standard tests in the detection of peripheral neuropathy (NIS-LL)

> SUDOSCAN has a sensitivity of 80% and a specificity of 95%



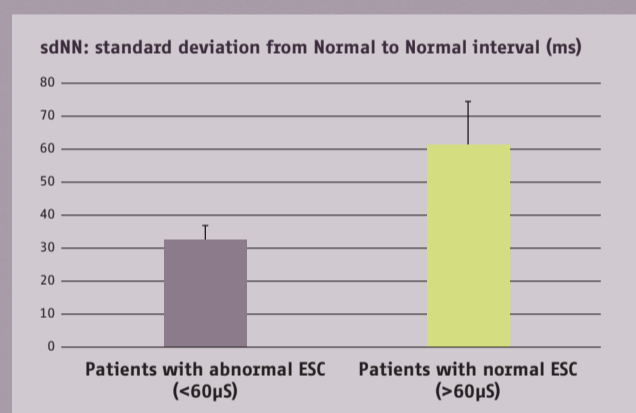
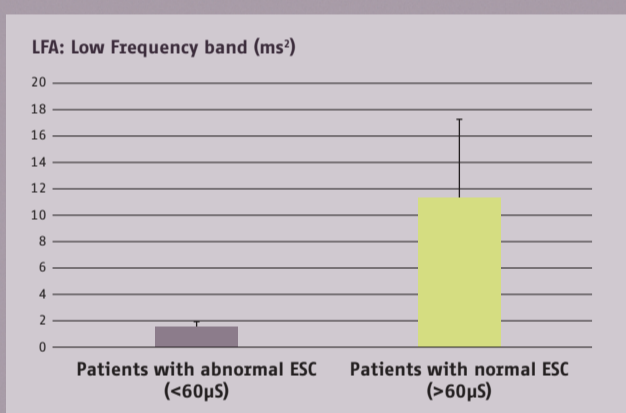
	Criterion*	Sensitivity	Specicity
Hands ESC	64	78.33	85.71
Feet ESC	77	78.34	92.38
Mean ESC	69	80	95.71

*Criterion corresponding with highest Youden index

NIS-LL: Neuropathy Impairment Score within the Lower Limbs
DM: Diabetes Mellitus
ESC: Electrochemical Sweat Conductance (SUDOSCAN)
ESC<60 μ S: sweat dysfunction suggesting a neuropathy
ESC>60 μ S: no sweat dysfunction suggesting no neuropathy

SUDOSCAN DETECTS AUTONOMIC NEUROPATHY

> Patients with abnormal ESC values had significantly lower baseline LFA and sdNN values which measure parasympathetic and sympathetic function



GOAL OF THE STUDY

- > Evaluate SUDOSCAN as a tool for assessing autonomic neuropathy in diabetic patients
- > Examine system performance i.e. Sensitivity and Specificity in detecting diabetic neuropathy
- > Compare SUDOSCAN results to industry standard tests for the diagnosis of diabetic neuropathy

	Healthy Controls (n=210)	Diabetes Mellitus (n=76)
Age*	45.4 \pm 0.6	54.7 \pm 1.6
Gender (F/M)	165/45	47/29
BMI*	23.6 \pm 0.2	29.6 \pm 0.8
Diabetes Type	NA	T1DM= 20 T2DM= 56
Diabetic Neuropathy (TNS>2)	NA	Yes= 60 No= 16
Painful Neuropathy	NA	Yes= 46 No= 14

*Mean \pm SEM

These results are extracted from a study conducted at Strelitz Diabetes Center for Endocrine and Metabolic Disorders and the Division of Endocrinology and Metabolism, Department of Medicine; Eastern Virginia Medical School.

