

NeuScan Report

CLINICIAN INFORMATION

Name: Manuel M. Mendez
Degree: D.C.
Title: Clinic Director

PATIENT INFORMATION

Name: John L. Smith
DOB: 08/01/196
SSN: 123-456-7890
Gender: Male
Address: 100 Home Ln,
Knoxville, TN 37912.

SESSION INFORMATION

Site Name: (Back_Scan_Site_Map)

Session Date Session Start
08/24/2006 2:48 PM

Sample Rate	Scan Time	Criterion Value
100	1	0.8

Measure 1	Measure 2
EMG_1	EMG_2

Assessment: Normative - Standing

Patient: John L. Smith
DOB: 08/01/196
Session Date: 08/24/2006

SSN: 123-456-7890
Gender: Male
Assessment: Normative - Standing

SURFACE EMG REPORT

A paraspinal surface electromyography (EMG) study was performed using a NeuroDyne System/3 unit with preamplified sensors. Following a standardized protocol, sensors were placed on the skin overlying the spine at specified sites. The EMG signal was monitored and automatically recorded when the computer detected a stable reading. The summary findings below compare the obtained levels to an established normative database to identify any locations showing greater than expected muscle activation. Sites showing left / right asymmetries greater than the generally accepted criteria of 20% are listed. A final within patient analysis evaluates the statistical distribution of values to identify any relatively high or low outlying readings. Complete data from the session is provided in a table format along with a graphic representation.

Finding 1

EMG readings at or greater than four standard deviations above the mean were observed at:
C2-L C2-R C4-L C4-R C6-L C6-R T2-L T2-R T4-L T4-R T6-L T6-R T8-L T8-R T10-L
T10-R L1-L L1-R L3-L L3-R L5-L L5-R

This is generally classified as a very severe elevation.

Finding 2

Sites showing left / right asymmetries of greater than 20% were found at:
C2 C4 T2 T4 T6 T8 L1 L3 L5

Finding 3

Within Patient Analysis - Relatively high readings were observed at:
T10-L T10-R L5-L

Patient: John L. Smith
 DOB: 08/01/196
 Session Date: 08/24/2006

SSN: 123-456-7890
 Gender: Male
 Assessment: Normative - Standing

Comparison of EMG Values to Norms					Normative Database			
Site	SD	Left	Right	SD	SD	Left	Right	SD
C2	****	174.0	124.6	****	1.9	1.8	1.8	1.9
C4	****	99.0	63.9	****	1.9	1.8	1.8	1.9
C6	****	107.9	120.8	****	2.5	3.5	3.5	2.5
T2	****	101.3	64.2	****	4.7	4.8	4.8	4.7
T4	****	139.6	220.2	****	4.7	4.2	4.2	4.7
T6	****	310.3	161.0	****	4.8	3.8	3.8	4.8
T8	****	139.1	92.8	****	5.0	3.9	3.9	5.0
T10	****	607.2	690.4	****	5.1	5.0	5.0	5.1
L1	****	116.5	90.7	****	5.3	5.3	5.3	5.3
L3	****	198.4	144.2	****	5.6	5.5	5.5	5.6
L5	****	933.2	255.3	****	5.6	5.7	5.7	5.6

Left and Right columns show EMG values in microvolts. SD= standard deviation.

The table above shows the EMG values measured from the patient and compares them to normative values from a reference database. A "-" indicates that the obtained values vary from the reference sample mean by less than one standard deviation. The "*" symbols indicated relative elevations (*= 1 SD above normative group, **= 2 SD, ***= 3 SD, ****= 4 or more SD).

Asymmetry Analysis:

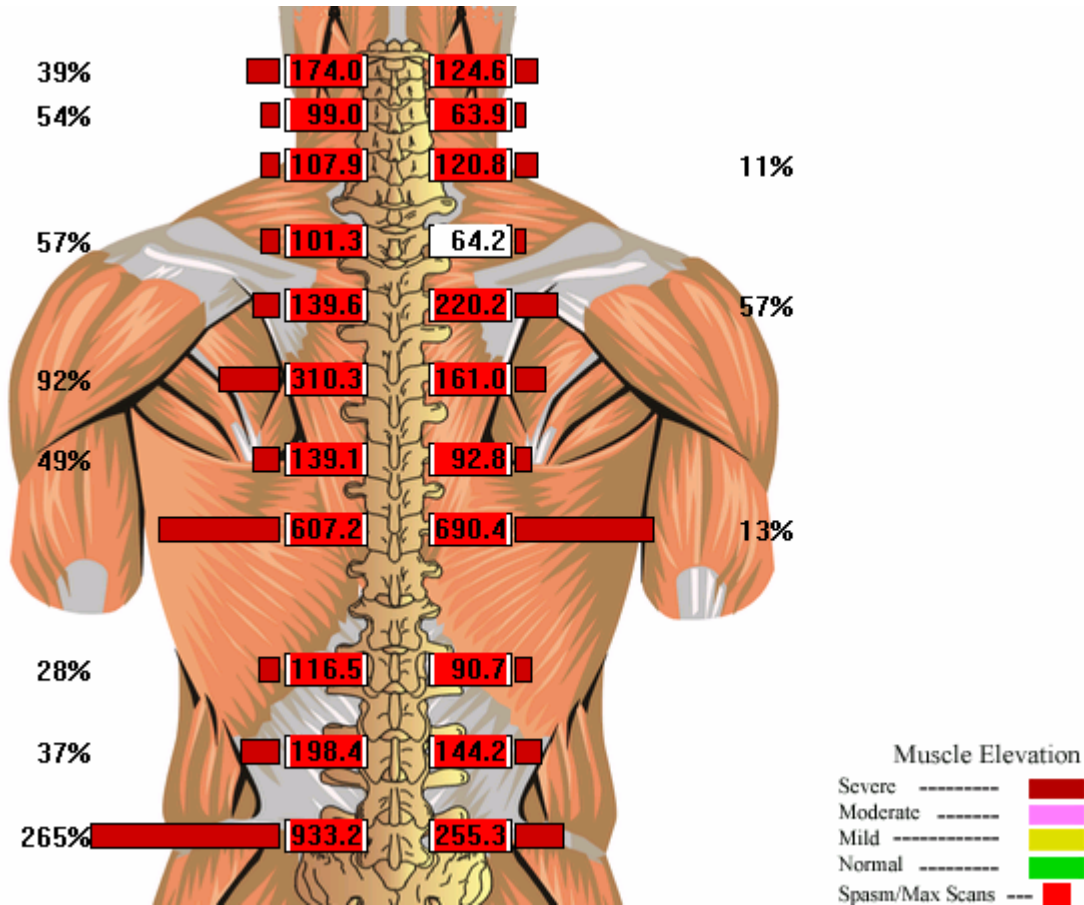
Site		Left	Right	Percent	L/R Diff.
C2	<<	174.0	124.6	39%	L
C4	<<<	99.0	63.9	54%	L
C6		107.9	120.8	11%	
T2	<<<	101.3	64.2	57%	L
T4		139.6	220.2	57%	R
T6	<<<	310.3	161.0	92%	L
T8	<<<	139.1	92.8	49%	L
T10		607.2	690.4	13%	
L1	<	116.5	90.7	28%	L
L3	<<	198.4	144.2	37%	L
L5	<<<	933.2	255.3	265%	L

EMG values are in microvolts. "<" = indicates a higher reading on the left side; ">" = a higher reading on the right.

The table above compares the Left and Right paraspinal readings for each site. One arrow (< or >) indicates a bilateral difference of greater than 20%, 2 arrows = greater than 30%, 3 arrows = greater than 40%, and 4 arrows = greater than 50%.

Patient: John L Smith
 DOB: 08/01/196
 Session Date: 08/24/2006

SSN: 123-456-7890
 Gender: Male
 Assessment: Normative - Standing



GRAPHIC REPRESENTATION of EMG LEVEL and ASYMMETRY DATA

EMG activity for each site is expressed numerically in microvolts. The length of the horizontal bar at each site is proportional to the EMG level with longer bars indicating greater activity. The color of the bars indicate how the patient's muscle readings compare to expected normative values (green = within normal range, yellow = mild elevation, pink = moderate elevation, red = severe elevation).

Left / Right differences (imbalances) in muscle activation are shown as percentages with % sign indicating the side with the higher reading. Both asymmetry (left / right balance) and level data should be taken into account in interpreting the scan data.