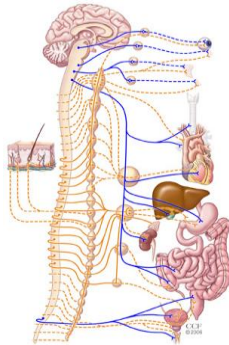


ANSHA'...

'Physicians should make Autonomic Nervous System monitoring part of each patient's routine office visit'...



AUTONOMIC NERVOUS SYSTEM

AS SUGGESTED BY:

Vinik A, Mitchell B, Maser R, Freeman R:
Diabetic Autonomic Neuropathy. *Diabetes Care* 26:1553-1579, 2003

Ziegler D:
Diabetic cardiovascular autonomic neuropathy: prognosis, diagnosis and treatment. *Diabetes Metab Rev* 10:339-383, 1994

Clark BF, Ewing DJ:
Cardiovascular reflex tests in the natural history of diabetic autonomic neuropathy. *NY State J Med* 82:903-908, 1982

Consensus Statement, Report and Recommendations for the San Antonio Conference in Diabetic Neuropathy, San Antonio TX July 1988.

THE FACTS:

Autonomic neuropathy is a serious and common complication of diabetes. In randomly selected cohorts of asymptomatic individuals with diabetes, 20% had abnormal cardiovascular autonomic function.

- Reduced heart rate variation is the earliest indicator of Cardiovascular Autonomic Neuropathy.
- Mortality is associated with Diabetic Neuropathy.
- Fifty percent of those with abnormal tests and autonomic symptoms died within 2.5 years, those with the most abnormal tests having the highest mortality.

It has been recommended that testing of diabetic individuals for cardiovascular autonomic dysfunction should be part of their standard of care.

Noninvasive tests are suitable for routine screening for autonomic dysfunction or for monitoring the progress of autonomic neuropathy.

When performed in a carefully controlled manner, the following tests have been validated and shown to be reliable and reproducible:

Test of Heart-rate control - Heart-rate response to
***Deep Breathing;**
***Valsalva maneuver, and**
***Standing**

(*The test phases help determine whether an **autonomic disorder is benign or life-threatening and provide information needed for planning treatment**)