



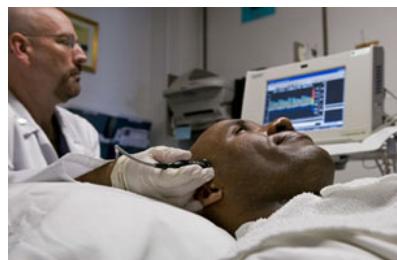
## PARKINSON'S DISEASE NEWS

<http://www.viartis.net/parkinsons.disease/news.htm>

28th December 2015 - New research

### ULTRA EARLY DIAGNOSIS OF PARKINSON'S DISEASE

Researchers determined the value of enhanced substantia nigra echo in the diagnosis of Parkinson's Disease by analyzing the intensity and area of substantia nigra echo using transcranial Doppler sonography (TCS). Transcranial Doppler sonography is a technique that uses a handheld, microprocessor-controlled, low-frequency, pulsed Doppler transducer to measure the velocity and pulsatility of blood flow within certain areas of the brain. For more information go to : <http://pubs.rsna.org/doi/pdf/10.1148/radiographics.15.1.7899596>



People without Parkinson's Disease were compared to people with ultra early stage Parkinson's Disease using results of substantia nigra echo, which are graded I (the least) to V (the greatest). The sensitivity of substantia nigra echo in diagnosing Parkinson's Disease was 89% and the specificity was 93%. The levels were much higher in Parkinson's Disease.

The figures for those people with Parkinson's Disease compared to those who did not have it were Grade V (19% v none), Grade IV (33% v none), Grade III (36% v 6%), Grade II (11% v 40%), Grade I (none v 53%). High grades were only present in Parkinson's Disease. Low grades were only present when there was no Parkinson's Disease.

Analysis of substantia nigra echo is of practical use for the diagnosis of the ultra early stage Parkinson's Disease, and so can potentially improve the accuracy of clinical diagnosis to significantly enhance the early clinical prevention of disability.

Reference : European Review of Medical and Pharmacological Sciences [2015] 19 (23) : 4621-4626 (J.J.Zhuang, Y.H.Zheng, X.W.Xu, L.Zhou)

Complete abstract : <http://www.ncbi.nlm.nih.gov/pubmed/26698260>

<http://www.viartis.net/parkinsons.disease/news/151228.pdf>

mail@viartis.net

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