

## Thalassemia intermedia: Transcranial doppler findings

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Thalassemia intermedia is a hereditary hemoglobinopathy, exhibiting increased platelet and coagulation activation, and is characterized by thrombotic complications, thus patients are at risk of developing cerebrovascular stroke. Despite remarkable advances in understanding cerebrovascular disease attributed to sickle cell anemia, data from other hemoglobinopathies have only recently started to emerge. Transcranial Doppler (TCD) is a noninvasive test that can identify patients with a high-risk cerebrovascular disease before confirmatory testing that may be invasive (angiography) or expensive (MR angiography).

The main objective of this study is to detect the cerebral hemodynamics using TCD in asymptomatic patients with thalassemia intermedia.

Fifty thalassemia intermedia patients were included in our study for which a TCD study of the middle cerebral arteries via a transtemporal approach was done. The peak systolic velocity, end diastolic velocity, the resistivity index and the mean velocity were measured.

Doppler findings were correlated to all data collected via history taking, examination and laboratory investigations to detect the possible factors that may put the patients at risk of developing stroke and confirming TCD sensitivity to detect them. Doppler velocities were abnormal in all thalassemia intermedia patients. Among the doppler measurements, the mean velocity was found to be more sensitive in recording abnormalities and in correlation with the different variables.

### Biography

Rania Hamdy Hashem is a Lecturer of radio diagnosis, faculty of Medicine, Cairo University with Medical Doctorate degree, Her subspecialty is pediatric radiology.

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