

## **THE IMPORTANCE OF MEASURING GLYCATED HEMOGLOBIN IN PATIENTS WITH STROKE OF UNKNOWN ETIOLOGY**

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Background: Stroke, especially ischemic, rises in frequency in young patients aged 25-49 years. Traditional stroke risk factors like dyslipidemia, smoking, arterial hypertension, obesity, cardiac embolism, heavy drinking and diabetes mellitus, can't be always identified. Illicit drugs, migraine, hormonal anticonceptionals or small vessel diseases must be excluded, but there are frequent cases where no risk factor seems to be present.

Aim: To demonstrate the usefulness of measuring glycated hemoglobin (HbA1c) in patients with stroke, detecting diabetes mellitus in patients with normal glycaemic fasting values, this risk factor being a modifiable one.

Material and methods: We studied 29 patients (16 men and 13 women) admitted with acute stroke, aged 25-49 years. All underwent CT scan and 18 additional cerebral MRI, showing 8 haemorrhagic (27.59%) and 21 ischaemic strokes (72.41%). Less than 30 years of age females predominated and after 43 approximately twice as many men as women were admitted with ischemic stroke. We analysed the risk factors in every patient, measuring also the glycated hemoglobin to identify the average plasma glucose concentration over prolonged time periods.

Conclusions: The most frequent (38%) hidden, but modifiable etiologic factor was a level of HbA1c higher than 6,5% in patients with no history of diabetes mellitus, or of chronic renal failure, deficiency of vitamin B12 or folate (conditions which could generate a false high level of HbA1c). Based on our findings, measuring HbA1c, especially in overweight, sedentary, dyslipidemic patients can be a very easy and cheap way to identify and treat an etiologic factor in young adults.