

Anticoagulant therapy and quantitative D- dimer level in patients with idiopathic intracranial hypertension

Thesis

Submitted for partial fulfillment of master degree in neuropsychiatry

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Abstract

Background: Idiopathic Intracranial Hypertension (IIH) is a syndrome of elevated intracranial pressure of unknown etiology. **Aim of the work:** To study the D-dimer level in patients with IIH, the role of anticoagulant therapy without evidence of occlusive sinus thrombosis and to correlate the level of D-dimer to the clinical and neurophysiological findings. **Patients and Methods :** Twenty four IIH patients were included. They were subjected to measurement of headache severity using headache impact test (HIT6), visual assessment including assessment of papilloedema using Frisén classification, visual acuity, visual field and visual evoked potentials (VEPs), measurement of serum quantitative D-dimer level using the ELISA technique, Magnetic resonance imaging and venography were also performed. Patients were divided into two groups, group (1) received acetazolamide and low molecular weight heparin (LMWH) in prophylactic dose for 2 weeks while group (2) received acetazolamide only. Follow up of the patients was done through HIT6 and ophthalmology assessment (fundus examination, visual acuity, visual field, VEP) after one and six months. Twenty four matched healthy volunteers were recruited as controls. **Results:** There was a statistically significant higher mean of D-dimer level among the cases compared to controls. There was a statistically significant improvement in the visual assessment at 6 months follow up among both groups with more improvement among group (1). **Conclusion:** The elevated D-dimer level and more visual improvement in the patients with IIH receiving LMWH added to acetazolamide, no correlation was found between D-dimer and 6 months follow up visual assessment in group (1) and group (2) IIH patients apart from significant positive correlation found between D-dimer and 6 months follow up log MAR in group (2) patients.

Key words : Idiopathic Intracranial Hypertension, D-dimer, anticoagulant therapy, visual assessment.