

**Value of Ultrasonic Measurement of Optic Nerve Sheath
Diameter in Diagnosis and Follow up of Cerebral Edema in
Patients with Disturbed Conscious Level**

Thesis

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Abstract

The aim of this study is to evaluate the diagnostic accuracy of ultrasonography of optic nerve sheath diameter (ONSD) in diagnosis and follow up for patients admitted at intensive care unit with clinically suspected increased ICP. This study was conducted in the ICU of Fayoum University Hospitals, 141 participants were enrolled in this study who were divided into 76 cases (patients) admitted with disturbed conscious level due to elevated ICP and 65 controls. Patients were subjected to full history, clinical examination, Ocular ultrasound; Brain computed tomography (CT) and Fundus examination. The present study showed that ONSD is significant in prediction of elevated ICP. ONSD also had superior predictive value for increased ICP compared to classical CT findings of intracranial hypertension as a normal CT scan does not exclude a raised ICP.

Keywords: *Ultrasonographic, Optic Nerve Sheath Diameter, increased intracranial pressure, Disturbed Conscious Level*