

**OPTIC NERVE SHEATH DECOMPRESSION
MEDIAL APPROACH EXPERIENCE OF
PRINCE SULTAN MILITARY MEDICAL CITY**

BIOGRAPHY

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Introduction: Idiopathic intracranial hypertension (IIH), also known as primary pseudo tumor cerebri, is a disorder of increased intracranial pressure (ICP) with normal Neuroimaging and CSF composition and no underlying etiology. The incidence of IIH in many Middle East countries has been estimated at 2.02–2.2/100,000 in the general population, which is higher than the Western rate. When vision impairment in a patient with papilledema is persistent, prompt treatment is required in hopes of preventing permanent loss of vision. If medical treatment is not effective, we can have surgical option like ventriculo-peritoneal shunt, lumbo-peritoneal shunt or optic nerve sheath decompression.

Methods: Retrospective, non comparative, interventional case series. Thirty cases underwent by using ONSD medial approach in Ophthalmology Department in Prince Sultan Military Medical City from 1995 to 2017. All these patient was referred from the Neurology Department. 26 patient was diagnosed as increase idiopathic intracranial pressure and 4 patient with secondary increase intracranial pressure. All patients underwent full Neuro ophthalmic assessment including visual acuity, visual field pre-operative and post operative. The treatment of IIH patients depends on their symptoms and vision status. The indications for ONSD Progressive visual loss who fail maximum medical therapy, severe bilateral disc swelling or visual loss in patients who do not comply with medical therapy. Secondary increase in ICP due to non-respectable tumor and Presence of additional risk factors like Renal failure, Hypertension, SLE and others.

Results: Main outcome measures the visual acuity, visual fields, and surgical complications will be discussed. Thirty patient underwent ONSD, in one eye with the worst visual field, 26 patients out of 30 (86%) cases due to idiopathic increase intracranial pressure, four patient (13%) cases due to secondary increase ICP. After ONSD 22 patient 73% improved visual field in both eyes. Six patient 20% stabilized visual field in both eyes, one patient 3% deteriorated post operative vision secondary to operative complication.

Conclusion: Optic Nerve Sheath Decompression effectively stabilizes or improves visual function in the majority of patients with PTC and visual loss. However, it may fail at any time after surgery; patients with PTC need to be followed-up routinely with visual field assessment to detect deterioration of visual function. Bilateral disc edema resolved and visual filed improvement seen most cases when only one eye underwent optic nerve sheath decompressed.

Key words: Optic Nerve Sheath Fenestration, Decompression, Pseudo Tumor Cerebri.