

# Idiopathic Intracranial Hypertension due to Excessive Application of Topical Steroids

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**Abstract:** Idiopathic intracranial hypertension also known as pseudotumor cerebri or benign intracranial hypertension is a condition characterised by raised intracranial pressure without detectable cause, raised icp without change in composition of CSF and associated with symptoms like headache, blurring of vision and tinnitus. Etiology is unclear, but it is mostly associated with obesity, prolonged corticosteroid therapy or rapid corticosteroid withdrawal, galactosemia, hypervitaminosis A and severe vitamin A deficiency. If not treated promptly, it may cause visual loss due to optic atrophy.

**Keywords:** Idiopathic Intracranial Hypertension, Topical Steroids, Benign Intracranial Hypertension, Pseudotumor Cerebri, Morning Headache, Tinnitus

## 1. Introduction

Idiopathic intracranial hypertension also known as pseudotumor cerebri or benign intracranial hypertension is a condition characterised by raised intracranial pressure without detectable cause, raised icp without change in composition of CSF and associated with symptoms like headache, blurring of vision and tinnitus. Etiology is unclear, but it is mostly associated with obesity, prolonged corticosteroid therapy or rapid corticosteroid withdrawal, galactosemia, hypervitaminosis A and severe vitamin A deficiency. If not treated promptly, it may cause visual loss due to optic atrophy.

## 2. Case Report

A 14 years old female child was brought to our hospital with complaints of headache for 10 days, vomiting, ringing sensation for 3 days and gait abnormality for 2 days.

Child had headache which was bilateral more after waking up from sleep and aggravated while walking, coughing, sneezing associated with blurring of vision, later child developed nonbilious projectile vomiting and ringing sensation in both ears and ataxic gait

No history of head trauma, fever, hearing loss

**Past history** - child has been suffering with hyperkeratotic scaly lesions which were diagnosed as psoriasis and was given topical steroids, anti-histaminics and vitamin A supplements 2 years back. she has been applying the topical steroids continuously for the past 2 years.

### General Examination

Child is obese, having multiple scaly hyperpigmented lesions on both the legs and elbows.

Anthropometry - weight - 60kgs Height - 147 cms BMI - 27.6

Vitals - temp - 98.7°f, BP - 130/90 mm Hg, RR - 25/min, PR - 64/min .

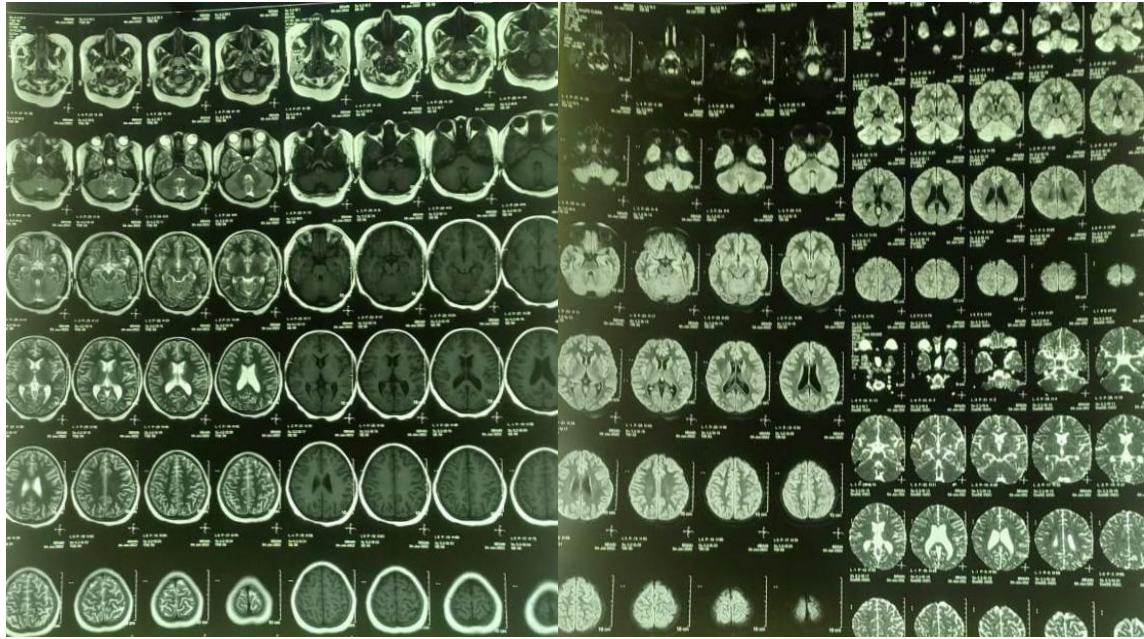


### CNS Examination

**Higher mental functions** - child is conscious, coherent, oriented to time, place and person. Her memory, speech and intelligence are normal. **Cranial nerve examination** - normal **Motor system examination** - bulk, power, tone, reflexes was normal **Sensory system examination** was normal. There were no signs of cerebellar dysfunction, no extra pyramidal symptoms and no signs of meningeal irritation. child had ataxic gait Other system examination was normal

### Investigations

Routine blood investigations were normal CSF analysis was normal Fundus examination showed hyperemia with blurring of disc margins and elevation of disc and venous dilatation, suggestive of papilledema MRI was normal.



### Management

Topical steroids were stopped. Child was treated symptomatically, and was given Mannitol 1g/kg /dose 8 th hrly for three days followed by oral glycerol 20ml tid for one week along with Acetazolamide 25mg/kg/day for two weeks. Child improved symptomatically and Fundoscoic examination at 45 days follow up visit was normal. Nutritional advise for obesity was given.

*Dermatological and transdermal formulations: drugs and the pharmaceutical sciences.* Boca Raton, FL: CRC Press, 2002, pp.401–498. [Google Scholar]

### 3. Discussion

Idiopathic intracranial hypertension is rare but a potential cause of headache with papilledema in children with normal brain imaging. Symptoms of headache, tinnitus, abnormal gait, along with disc swelling and normal mri findings supported the diagnosis of idiopathic intracranial hypertension. Improvement of symptoms and decrease in disc swelling after stopping topical steroids indicates that topical steroids might be the cause. About 5% to 10% of medications applied topically gets absorbed into the skin, excessive application of topical steroids daily for 2 years must have caused idiopathic intracranial hypertension.

Topical steroids are used for various dermatological conditions and are easily available as over the counter medication. Effective measures must be taken to educate pharmacists and people about risk of excessive topical steroids application

### References

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