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Steroid Abuse Induced Benign Intracranial Hypertension in an Infant

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Introduction

Idiopathic Intracranial Hypertension is a well known phenomenon in both pediatric population and also adults. Steroid induced Intracranial Hypertension is also well documented in adults but sparsely reported in children and no such literature reported in Infants from India.

We would like to present our case of steroid induced intracranial hypertension in a 6 months old male child who was on prednisone drops for past 3 months misused by parents as prescribed by some quack as relief medication for common cold. Our intention is to highlight the level of abuse of steroids over the counter practice and to show the level of detrimental side effects it causes with evidence inorder to report from Indian literature.

Case Report

A 6 months old male child was brought by parents with complaints of poor feeding, excessive cry and irritability. On examination child (fig 1) had bulging anterior fontanelle, BP was 120/80 mmHg, > 99th centile for the age. Child is obese and weight was 10 kg, Z> 2SD on WHO chart. Child was suspected to be having cushingoid

features. On further probing mother gave a history of usage of drops for common cold as suggested by a quack continuously for past 3 months which was found to be Prednisolone drops.

Child had increased tone in muscles. Reflexes **CSF** were brisk. opening pressure >30mmH20. Biochemical analysis and cell count was normal. MRI brain is normal with slightly dilated ventricles. Serum cortisol level was 2.9pg/ml and ACTH was 8pg/ml. Endocrinologist opinion was taken and gradual tapering and stoppage of prednisolone syrup was suggested and acetazolamide, 3%NS, Nifedepin and mannitol were used to get down the raised ICP and systemic hypertension. Fundus examination was done and not remarkable. Once child became stable, feeding established and discharged home.

On follow up: weight loss appreciated (fig2), tone normalized, serial monitoring of cortisol levels done and are reported normal. Drops completely stopped.

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Fig 1.



Fig 2.



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Discussion

Benign intracranial hypertension is a close differential for meningoencephalitis in infantile age group. Sepsis is always a concern and needs to be ruled out but possibility of non infective pathologies should be always kept in mind whenever the history is atypical. IICH is a known entity in children but steroid induced ICH is rare. Shoba G pai et al¹ from KMC, manglore have reported 18 cases of pediatric Idiopathic

intracranial hypertension but none of had history of prior usage of steroids.

Ramana M et al² from BGS, Bangalore have reported a case of steroid induced benign Intracranial Hypertension in a 30 years women due to over the counter abuse of dexamethasone for weight gain.

Freidman et al³ diagnostic criteria for IICH has been applied for our case.

Roy AG et al⁴ from Amrita, kochi have reported 24 cases of Idiopathic Intracranial Hypertension in children of whom 12 were Infants and none of them had prior usage of steroids.

Steroid abuse in India among Infant population especially by quacks for weight gain is a well known problem being abused for weight gain, chronic cough, viral fevers but abusing it for even common cold and leading to consequences like Intracranial Hypertension raises the alarm which all paediatricians should condemn and take to the notice of government.

Conclusion

Strict regulations on prescription and dispensing steroid drops especially for children are anticipated and need more evidence and published literature in support of this as what we see is only a tip of iceberg.

Conflicts of Interest: No

Informed consent from parents: Taken

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