



Opinion

Volume 4 Issue 5 – June 2017
DOI: 10.19080/AJPN.2017.04.555703

Acad J Ped Neonatol

Copyright © All rights are reserved by Nasser Nadim H

Cortisol Push to a Stuporotic Severe Hyponatremic Child Nonresponsive to NaCl Rehydration



Nasser Nadim H^{1,2*} and Nasir Nadir N³

¹Clalit Health Organization Services

²Faculty of Medicine, Bar Ilan University, Israel

³Internship Ram bam Medical Centre, Haifa

Submission: March 16, 2017; **Published:** June 01, 2017

***Corresponding author:** Nasser Nadim H, Department of Paediatrics, Clalit Health Organization Services, Kisra-Smei, 201, area code: 20138, Israel, Email: Nasser_nadim9@hotmail.com

Opinion

In case of severe hyponatremic dehydration, unresponsive to parenteral NaCl supplementation, which deteriorates from nonspecific vertigo, nausea, headache and muscle cramps to hypotension, stupor and coma, give an urgent intravenous bolus of hydrocortisone.

Rapid improvement after giving the cortisol intravenous push, is expected, and hence is a major marker for the diagnosis of adrenocortical insufficiency. This is our experience with five children who were seven to fourteen-years-old. They suffered from diarrhea and hyponatremic dehydration whose general condition deteriorated upon twelve to twenty four hours to stupor, and relived by a push of cortisol. Many clinicians worry about the safety of cortisol treatment in such yet undiagnosed cases. Other pediatricians worry about the safety of mineralocorticosteroids. However, while side effects do occur, they are usually minor, such as hyperglycemia, increasing probability of infections, controllable hypertension, as a side effect of the mineralocorticoid treatment.

In the long term, no matter how much time passed after the initial diagnosis of adrenocortical insufficiency; either the familial primary acquired (termed as Addison disease) could be looked for, or that with elevated ACTH (termed as secondary adrenal insufficiency), clinicians must be alert of hyponatremia flares,

as a major complication in those patients. Some clinicians start fludrocortisone as soon as possible and stop it only when serum sodium level is normal for a minimum of three months period, or if renin serum activity is above normal limits. In the long term, when the patient is asymptomatic, it is good to check serum sodium levels as frequently as twice a year. Resuming treatment with a mineralocorticoid is as needed.

Do not miss endocrine crisis due to adrenocortical insufficiency, give an IV push of hydrocortisone whenever a conscious child enters a state of stupor or comatose, under a state of severe hyponatremia (<128meq/dl). It is not only lifesaving, but also diagnostic. This condition is well known for endocrinologists and primary physicians, but they simply forget the idea of adrenocortical insufficiency and endocrine crisis [1-4].

References

1. Lamberts SW, Bruining HA, de Jong FH (1997) Corticosteroid therapy in severe illness. *N Engl J Med* 337(18): 1285-1292.
2. Arlt TAM, Allolio B (2003) Adrenal insufficiency. *Lancet* 361(9372): 1881-1893.
3. Cooper MS, Stewart PM (2003) Corticosteroid insufficiency in acutely ill patients. *N Engl J Med* 348(8): 727-734.
4. Salvatory R (2005) Adrenal insufficiency. *JAMA* 294(19): 2381-2488.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/AJPN.2017.04.555703](https://doi.org/10.19080/AJPN.2017.04.555703)

**Your next submission with Juniper Publishers
will reach you the below assets**

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission

<https://juniperpublishers.com/online-submission.php>