A Rare Cause of Hyponatremia

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SIADH

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A Rare Cause of Hyponatremia

Dr. Tamanna Gupta, Dr. Pratibha Pereira

**CLINICAL HISTORY:**

Complains of vomiting since 1 day

C/o hiccups since 1 day

Known case of Hypertension (TAB TEMLISARTAN 20MG 1-0-0)

K/c/o Type 2 Diabetes

Mellitus (Insulin Inj. Human Mixtard 30/70 20-0-16 U S/C)

K/c/o Cerebrovascular accident (CVA)

K/c/o Benign prostatic hyperplasia (BPH)

K/c/o Coronary artery disease (CAD)- Triple vessel disease (Ecospirin Gold 0-0-1)

**EXAMINATION AND INVESTIGATIONS:**

BP: 140/80 mmHg

RS: Bilateral NVBS, no added sounds
CVS: S₁ S₂ heard, no Murmurs

Per Abdomen: Soft, Non-tender, No organomegaly. Bowel sounds heard.

CNS Examination: Conscious, oriented, no focal neurological deficits.

Blood routine, LFT, RFT, CXR, MRI brain were normal

Urine Routine:

1+ albuminuria

2% sugar

no ketone bodies

Urea:27

Creatinine:0.7

Serum electrolytes:

Na+ 122

K+ 5.6

Cl- 96

Glucose Random:286mg/dl

Urine osmolality:364mOsm/kg water
USG abdomen: s/o BPH

ECHO and Coronary angiogram: s/o CAD

CT abdomen: Mild wall thickening involving pylorus and D1 segment of duodenum, Gall bladder sludge, small right renal calculi

Upper GI endoscopy: Hiatus hernia, duodenal nodule(D1)-biopsy was taken-S/o neuroendocrine tumour

ChromograninA: 524.90ng/ml

Serum gastrin: 171pg/ml
CT SCAN - ABDOMEN

FINAL DIAGNOSIS:

1. Duodenal Neuroendocrine tumor with Syndrome of inappropriate antidiuretic hormone secretion (SIADH)

2. Hypertensive diabetic nephropathy

3. Obstructive nephropathy

4. Gastritis
TREATMENT:

Tolvaptan was started and patient was followed for one month.

Sodium correction was done.
• Chromogranin A = 524.90 ng/ml (<76.30 ng/ml)
• Serum Gastrin = 171 pg/ml (13-115 pg/ml)
• Immunohistochemistry report

![Image of KI67 staining score table]

Grade - 2 Neuroendocrine tumour.
Scores 0 & 2 – Negative  Scores 3 to 8 – Positive

• Patient was started on Tolvaptan
• Serum sodium levels improved

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DISCUSSION:

This is a case of SIADH with no identifiable cause. Nevertheless, we incidentally found this patient to have functional Neuroendocrine tumour (NET) of the GIT. They can arise from any part of GIT. In relation to their pluripotent neuroendocrine cellular origin, NET can produce several resultant paraneoplastic syndromes. One of these syndromes is SIADH. We associate this SIADH with NET.

However, literature does not mention NET as one of the causes of SIADH. Persistent hiccups were an unusual presenting manifestation of hyponatremia. Tolvaptan selectively inhibits the binding of ADH to the V2 receptor. Binding to the V2 receptor induces excretion of electrolyte-free water without altering the electrolyte excretion.

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REFERENCES:

