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A Rare Cause of Hyponatremia

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CLINICAL HISTORY:

Complains of vomiting since 1 day

C/o hiccups since 1 day

Known case of Hypertension (TAB TELMISARTAN 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: S_1 S_2 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

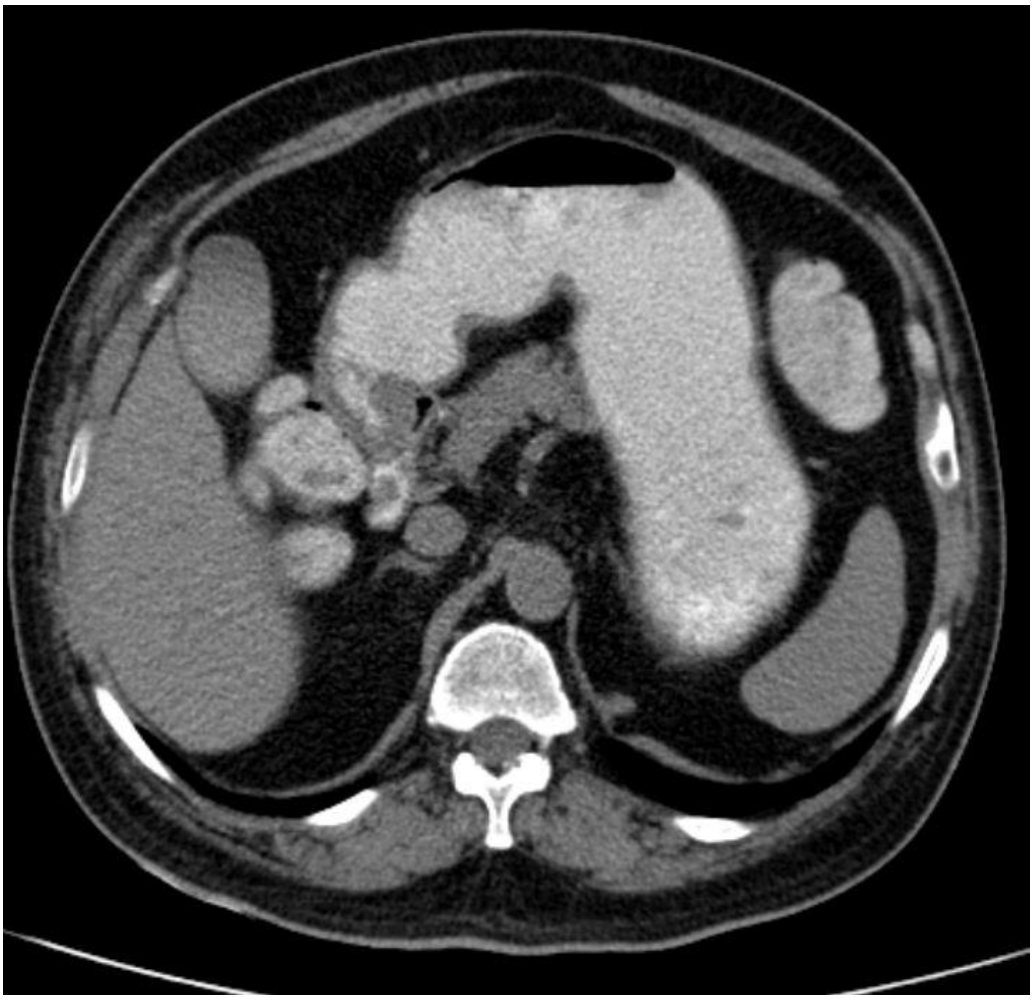
ECHO and Coronary angiogram: s/o CAD

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

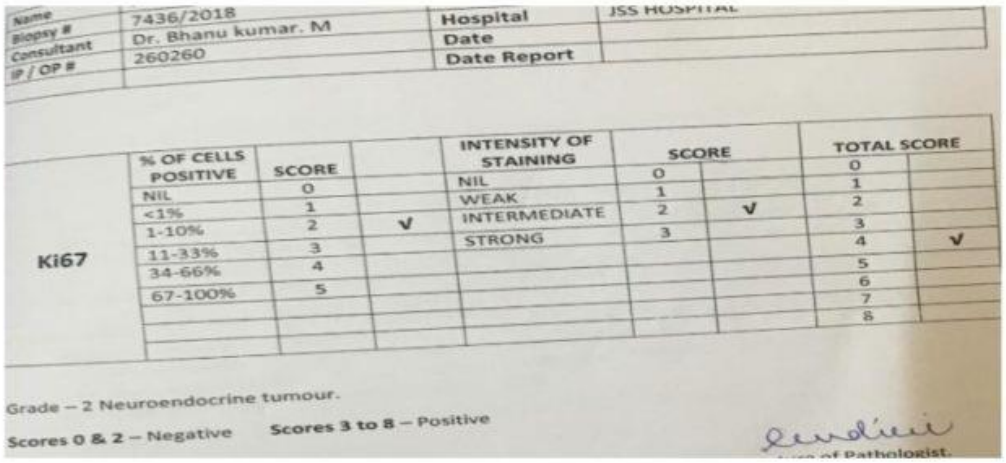
4.Gastritis

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



Name	7436/2018		Hospital	JSS HOSPITAL					
Biopsy #	Dr. Bhanu kumar. M		Date						
Consultant	260260		Date Report						
IP / OP #									
	% OF CELLS POSITIVE	SCORE		INTENSITY OF STAINING	SCORE		TOTAL SCORE		
Ki67	NIL	0		NIL	0		0		
	<1%	1		WEAK	1		1		
	1-10%	2	V	INTERMEDIATE	2	V	2		
	11-33%	3		STRONG	3		3		
	34-66%	4					4	V	
	67-100%	5					5		
							6		
							7		
							8		

Grade – 2 Neuroendocrine tumour.

Scores 0 & 2 – Negative Scores 3 to 8 – Positive

Pathologist.

- Patient was started on Tolvaptan
- Serum sodium levels improved

Date	Serum sodium level
10/12	123
11/12	122
12/12	126
14/12	124
15/12	116
16/12	120
17/12	129
18/12	129
19/12	124
21/12	126
22/12	121
24/12	131
25/12	137
27/12	132
30/12	135
31/12	132
06/01	133

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.

ACKNOWLEDGEMENTS: None

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