

MODERATE/SEVERE HYPOVOLEMIC HYPONATREMIA WITH URINARY SODIUM LOSS SECONDARY TO HYPOALDOSTERONISM: ANALYSIS OF 28 CASES

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INTRODUCTION

Hypoaldosteronism (HA), a cause of hypovolemic hyponatremia (HN) with urinary (U) sodium (Na) loss, is often underdiagnosed. We studied the characteristics of 28 patients with an episode of HA-induced moderate/severe hyponatremia.

RESULTS

Table 1. General Characteristics.

Sex	Males	Females
	57,1%	42,8%
Mean Age	71,36 years (SD 15,5)	

Graph 1. Comorbidities.

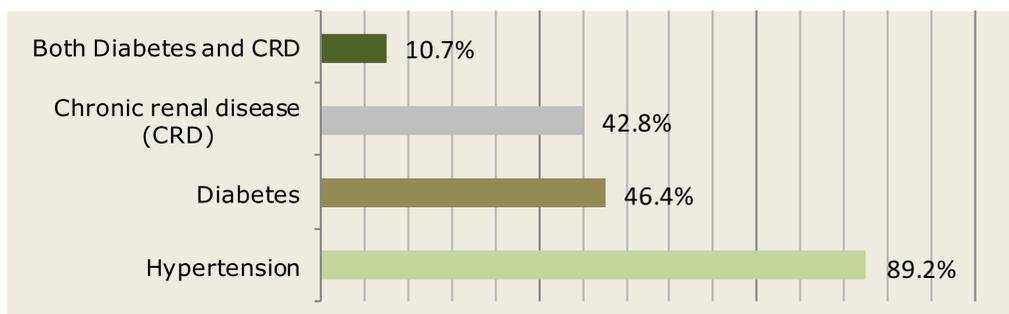


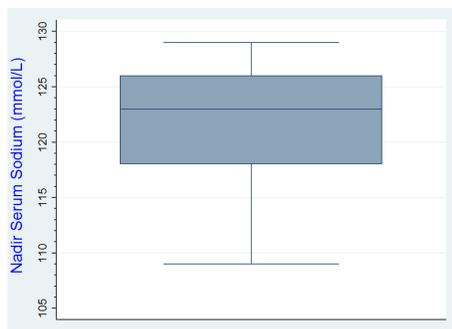
Table 2. Mean values at diagnosis (SD)

SNa	SK	UNa	POsm	UOsm	TTKG	SUrea	SCreatinine	Uricemia
126.07 (5.62)	4.93 (0.62)	73.03 (38.66)	277.78 mOsm/kg (12.47)	392.53 mOsm/kg (167.75)	3.6 (0.85)	50.78 mg/dl (25.23)	1.12 mg/dl (0.56)	5.26 mg/dl (1.45)

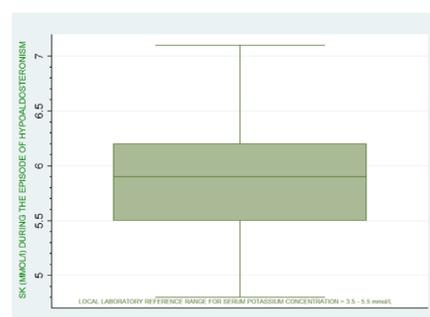
Table 3. Mean SNa and corresponding SK at diagnosis by Group.

	Group I	Group II	Group III
Mean SNa	123.9 (3.18)	121.2 (2.83)	120.63 (6.12)
Mean SK	4.85 (0.62)	4.65 (0.49)	5.27 (0.62)

Graph 2. Nadir serum Sodium.



Graph 3. Maximum serum Postassium.



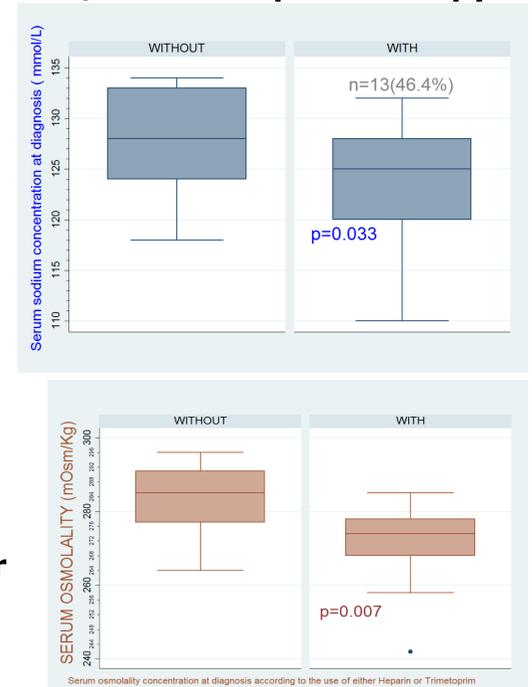
Patients with both high renin (>25 pg/ml) and low aldosterone (<100 pg/ml), all in Gr III, had significantly lower NSNa: 113.33(4.04) than the rest: 123.19(4.2), p= 0.033.

Graph 6. SOsm with or without heparin and/or trimetoprim therapy.

Graph 4. Aldosterone by groups.



Graph 5. SNa with or without heparin and/or trimetoprim therapy.



CONCLUSIONS

Hypoaldosteronism can induce marked hyponatremia. Most patients had risk factors for both inhibition of aldosterone secretion and mineralocorticoid resistance. Heparin and/or trimetoprim use was associated with lower serum sodium and serum osmolality levels.

