**\*Hyponatraemia DR.Methaq A.M.Hussein**

Hponatraemia(plasma Na less then 135 mmol/lit.)is acommon electroyte abnormality.the causes of it are best categorised according to the volume status(ECF VOLUME)

A.true hyponatraemia B.false hyponatraemia C.transient hypon.

A.Causes of it:

**Volume status EXAMPLES**

**Hypovolaemia**  *renal Na losses*

*Diuretic therapy*

*Adrenocortical failure*

*GIT loss of Na*

*Vomiting,diarrhoea*

*Skin Na loss*

*Burn*

**EUVOLAEMIA (water retension***) Primary polydipsia*

*Excessive electrolyte-water infusion*

*SIADA*

*Hypothyroidism*

**HYPERVOLAEMIA (Na retension with**  *Cong.heart failure*

***Relatively greater water retention****) cirrhosis*

*Nephrotic syndrome*

*Chronic renal failure*

***Clinical features***

*Hyponatraemia usually detected asymtomatically,but may be associated with mild confusion,lassitude,anorexia,nausia,vomiting,seizures and coma specialy those pateints with very low serum level(less then 110 mmol/lit) .*

*Central pontine myelinolysis occurred due to rapid correction of chronic hyponatraemia.*

***SIADH***

*The syndrome of inappropriate antidiuretic hormone secretion (SIADH) should be suspected in any patient with hyponatremia, hypoosmolality, a urine osmolality above 100 mosmol/kg, a urine sodium concentration that is usually above 40 meq/L, normal acid-base and potassium balance, and frequently a low plasma uric acid concentration .*

***ETIOLOGY***

*CNS disturbances, Tumors, Drugs ,Major surgery, Pulmonary disease, Hormone administration ,HIV infection ,Hereditary SIADH AND Idiopathic .*

***Treatment***

*1.plasma Na more then 120 mmol/lit.*

*-water restriction to 0.5 lit./day*

*-0.9% saline if volume deleted.*

*-stop drugs and treatment of underlying cause.*

*2.plasma Na 110-120 mmol/lit.*

*-water restriction to 0.5lit/day*

*-0.9% saline 1lit/12 hourly*

*-add frusemide 20mg i.v if overload.*

*3.plasma Na less then 110 mmol/lit.*

*-hypertonic saline i.v .*

*-add frusemide 20 mg i.v if overloaded.*

*Note:treatment should be rapidly if;*

*-serious sign and symptoms*

*-acute symptoms*

***Pseudohyonatraemia:***

*False decine of serum sodium despite normal quantity of Na pool.*

*Causes:*

*Hyperlipidaemia,hyperprotenaemia,sever hyperglycaemia and mannitol infusion.*