


**Electrolyte Maintenance & Replacement - Summary Clinical
 Guideline Derby & Burton**





Reference No: NIC ME 01

Summary guideline

HYPERNATRAEMIA SUMMARY:

<p>HYPERNATRAEMIA PLASMA SODIUM >145 MMOL/L</p>		<p>ASSESS FLUID BALANCE IF DEHYDRATED GIVE SLOW REHYDRATION OVER 24-48 HOURS REHYDRATION MAY BE ORALLY OR SLOW IV DO NOT ALLOW SERUM SODIUM TO DROP BY >10MMOL/L PER 24 HOURS</p>
<p>MONITOR U&E'S DAILY</p>		

HYPONATRAEMIA SUMMARY:

<p>HYPONATRAEMIA PLASMA SODIUM ≥130 MMOL/L</p>		<p>ORAL SUPPLEMENT 30% SODIUM CHLORIDE (5MMOL/ML) DIVIDE TOTAL DAILY DOSE FOR TOLERANCE GIVE 3 - 4 TIMES A DAY</p>
<p>HYPONATRAEMIA PLASMA SODIUM 125 - 129 MMOL/L</p>		<p>SUPPLEMENT - USING: (135 - PLASMA SODIUM) X 0.6 X WEIGHT (KG) = MMOL/DAY</p>
<p>HYPONATRAEMIA PLASMA SODIUM 121 - 124 MMOL/L</p>		<p>SUPPLEMENT - USING: (135 - PLASMA SODIUM) X 0.6 X WEIGHT (KG) = MMOL/DAY</p>
<p>HYPONATRAEMIA PLASMA SODIUM ≤120 MMOL/L</p>		<p>BOLUS: 15-20ML/KG 0.9% SODIUM CHLORIDE CHECK LEVELS 6-8 HOURLY</p>

MONITORING U&E'S:

- **WHEN UNSTABLE MONITOR 8-12 HOURLY**
- **ONCE STABLE MONITOR DAILY**

HYPOKALAEMIA SUMMARY:

HYPOKALAEMIA

PLASMA POTASSIUM <3.5MMOL/L

Monitor U&E's Daily

**INCREASE THROUGH SUPPLEMENTATION.
CONSIDER ADDING:**

**POTASSIUM CHLORIDE 1MMOL/ML
ORAL SUSPENSION (KAY-CEE-L)**

OR

**ADD POTASSIUM TO INTRAVENOUS FLUIDS
OR**

ADD POTASSIUM TO NEXT BAG OF TPN

HYPERKALAEMIA SUMMARY:

HYPERKALAEMIA

**PLASMA POTASSIUM >7.5MMOL/L ON X2 FREE
FLOWING VENOUS OR ARTERIAL SAMPLES**

STOP ALL POTASSIUM CONTAINING MEDICINES

START URINE OUTPUT MONITORING

START CARDIAC MONITORING

**IF EGG SHOWS: TALL TENTED T WAVES,
PROLONGED PR, FLAT P WAVES, WIDE QRS OR
ARRHYTHMIA**

START ABC AND CALL FOR SENIOR

**CALCIUM GLUCONATE 10% IV
(0.5ML/KG OR 0.11MMOL/KG OVER 5-10
MINUTES)**

**SODIUM BICARBONATE TO HALF CORRECT
ACIDOSIS**

**SALBUTAMOL 4 MICROGRAMS/KG IV BOLUS
OVER AT LEAST 5 MINUTES**

**MUST DISCUSS WITH SENIOR PRIOR TO
STARTING:**

**GLUCOSE/ INSULIN INFUSION (5 UNITS
ACTRAPID TO 50ML OF 10% GLUCOSE. START
AT 0.1 UNITS/KG/HR)**

**CALCIUM RESONIUM 125-250MG/KG PR EVERY
6 HOURS**

HYPERCALCAEMIA SUMMARY:

HYPERCALCAEMIA
IONISED CALCIUM >1.4MMOL/L



ASSESS FLUID STATUS AND MEDICATIONS

**PERFORM CALCIUM, MAGNESIUM,
PHOSPHATE, VIT D, ALP, ECG.**

CONSIDER RENAL USS

GIVE REHYDRATION IF DEHYDRATED

**CONSIDER LOOP DIURETICS,
BISPHOPHONATES AND STEROIDS**

(DISCUSS WITH SENIOR)

HYPOMAGNESAEMIA SUMMARY:

HYPOMAGNESAEMIA
INVESTIGATE IF HYPOCALCAEMIA OR
HAS BEEN TREATED FOR
HYPOCALCAEMIA.
TREAT IF LEVELS ARE LESS THAN:
<0.7 MMOL/L



TREATMENT:
**100MG/KG / 0.4MMOL/KG / 0.2ML/KG
OF 50% MAGNESIUM SULFATE VIA
SLOW IV OR IM INJECTION EVERY 6-12
HOURS.**