Laboratory News
Please circulate to all members of staff within the practice
NHS Greater Glasgow and Clyde
Issue 6
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A Heads Up on Hypomagnesaemia!

Clyde Sector

Hypomagnesaemia is relatively common with most patients being asymptomatic. As magnesium plays an important role in calcium (release of PTH) and potassium (renal Na/K ATPase pump) homeostasis, symptomatic hypomagnesaemia is often associated with hypokalaemia and hypocalcaemia. As a predominantly intracellular ion, total body magnesium depletion may be present when serum magnesium is within the reference range.

Reference Range for serum magnesium 0.7 – 1.0 mmol/L

Management:

-Identify the cause; poor intake (alcoholism, malnutrition), gastrointestinal and renal losses and drugs (proton pump inhibitors, diuretics and chemotherapy) and correct if possible.
-Look for symptoms; neuromuscular (seizures, tetany, carpopedal spasm, parasthesiae, muscle weakness), cardiac (arrhythymias, conduction defects).
-Check U&E and BONE profile for hypokalaemia and hypocalcaemia.

Mg 0.3 – 0.7 mmol/L and patient asymptomatic (with normal renal function)

- Give oral magnesium supplements (may exacerbate diarrhoea leading to further losses); magnesium aspartate dihydrate (Magnaspartate®),*magnesium glycerophosphate (this may cause less diarrhoea than other oral supplements), magnesium oxide capsules or magnesium hydroxide mixture.
- Monitor serum magnesium daily initially
- May take up to 35 days oral supplementation to replace whole body stores
- Reduce dose if diarrhoea develops

Mg < 0.3 mmol/L and patient symptomatic (+/- hypokalaemia/hypocalcaemia)

or

Mg 0.3-0.7 mmol/L, unable to tolerate oral magnesium

- **Patient requires admission for IV replacement**

Note:
- Refractory hypocalcaemia/hypokalaemia will not resolve until magnesium is replaced
- Magnaspartate® - licensed for use within NHS Scotland
- *currently unlicensed for the treatment of hypomagnesaemia in the UK

Updated Guidelines on the Use of Faecal Calprotectin within NHS GGC

There is a link next to the Faecal Calprotectin test in ICE that will take requestor directly to the guidelines, or click link:

http://www.staffnet.ggc.scot.nhs.uk/Info%20Centre/PoliciesProcedures/GGCClinicalGuidelines/GGC%20Clinical%20Guidelines%20Electronic%20Resource%20Direct/Guidelines%20on%20the%20Use%20of%20Faecal%20Calprotectin%20in%20Adults%20Within%20NHS%20GGC.pdf

Citrated Platelet Counts

A small number of patients suffer from platelet clumping when their EDTA (purple top) tubes are analysed resulting in falsely low platelet counts being recorded. At this point the lab will ask for a citrate (blue top) sample to be sent to try and get an accurate platelet count. Please remember to also send an EDTA with the citrate sample to allow the lab to complete the rest of the FBC parameters.

Sample Labels – Long and Short of it

- Incorrect positioning of labels can cause problems in the laboratory
- Please remember to place the PID label well above the bottom of the tube.
- This is a particularly an issue with the smaller EDTA tubes used in Haematology (as shown).
- If it is placed too low down on the tube it will cause issues with the barcode readers and the laboratory analysers and increase turnaround times for results.

We would be delighted with your feedback on issues that you would like us to address in the newsletter. Comments or suggestions can be sent to:

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