Minutes of the meeting of the CREST Sub-Group on the Management of Hyponatraemia in the Adult Patient which was held on Wednesday, 24 April 2002 at 2.30pm in Room 414, Dundonald House.

Present: Dr C Russell (Chair)
Dr E Bergin
Mrs R Devlin
Dr K Fitzpatrick
Dr G McVeigh
Dr A Montgomery
Dr T Trinick
Miss A Lowry (Secretariat)

Apology: Dr P Flanagan

1. Introduction and apologies

Dr Russell welcomed those present especially Dr Fitzpatrick as it was his first meeting. The apology was noted.

2. Minutes of the previous meeting held on 27 February 2002

The minutes of the previous meeting were accepted as an accurate record.

3. Hyponatraemia

Dr Russell invited those who had sent or tabled papers to give a brief synopsis of them.

(i) Paper from Dr McVeigh

Dr McVeigh said that in preparing his paper he had tried to be brief yet ensure that there was sufficient detail to treat patients. He gave an outline of the flow chart and the accompanying text which covered what he felt were the most important headings:

Identification
Evaluation
Treatment Principles
Formulae
Acute (< 48hrs) Symptomatic Hypotonic Hyponatremia
Chronic (>48hrs) Symptomatic Hypovolemic Hyponatremia
Hyponatremia with a Euvolemic State.

Dr McVeigh queried where the flow charts would be displayed and it was agreed that they should be in most hospitals wards.

(ii) Paper from Dr Trinick

Dr Trinick presented the sodium results for the 6 months from August 2001 to January 2002 in the Ulster Hospital. The figures excluded ICU cases. The details were broken down under GP and hospital samples and it was interesting to note that the numbers for GPs were smaller than those for the hospital.

(iii) Paper from Dr Bergin

In presenting his paper Dr Bergin said that he used this method in practice, going through the steps, which are not shown in any particular order, to exclude certain medical conditions to arrive at the treatment required. He was in the process of summarising the information and tabled the work he had done so far. When completed he will circulate the summary by Email to the Group.

Action: Dr Bergin

(iv) Paper from Dr Montgomery (tabled)

Dr Montgomery noted that a lot of work had been done in Australia and tabled a paper which she had downloaded from the Internet on "Hyponatraemia in elderly psychiatric patients treated with Selective Serotonin Reuptake Inhibitors and venlafaxine: a retrospective controlled study in an inpatient unit". This study found that SSRIs and venlafaxine had a significant association with hyponatraemia. Venlafaxine when compared with SSRIs may be associated with an even higher risk of hyponatraemia. Dr Montgomery also tabled a paper from the Oregon Health and Science University which set out some important questions to be considered, differential diagnosis, differential diagnosis of SIADH and hyponatraemia classified based on serum osmolality, volume state and urine sodium.

(v) Paper from Mrs Devlin

Mrs Devlin said that in her search she had downloaded a paper on "Hyponatremia and hypernatremia – A systematic approach to causes and their correction". A copy of this paper would be circulated to members. She had also asked the CREST Secretariat to obtain a copy of the paper "Problems with solutions: Drowning in the brine of an inadequate knowledge base" which contained details of a survey of 150 JHOs. Only 56% of JHOs checked the fluid balance charts on morning ward rounds but yet they were responsible for prescribing fluids in 89% of cases. Less than half knew the sodium content of 0.9% saline or the daily sodium requirement.

(vi) Situation in ICUs

In response to a query Dr Fitzpatrick said that in the ICU they would not come across a lot of hyponatraemia cases. When a patient is leaving theatre the fluids would be written up for the next 24 hours. The problem arises when the patient goes back to the ward.

Dr McVeigh referred to papers he had which contained some interesting material and he asked the Secretariat to circulate copies to members for information. He highlighted that it said that an increase of 100mg per decilitre in the serum glucose concentration decreases serum sodium by approximately 1.7 mmol per liter rather than 2.4 mmol per liter.

Action: Secretariat

4. Guidelines

Dr Russell suggested that the guidelines should be brief approximately 5-6 pages including an audit tool. They should be accompanied by a laminated flow chart similar to the one Dr McCarthy presented at the last meeting. The proposed layout of the document was as follows:

1. Introduction
   Look at "at risk" patients, the conditions they have, the degree of severity – acute, chronic etc.

2. Consequences

3. Signs and symptoms

4. Investigations

In the discussions which followed the difficulties of including figures in the guidelines were highlighted as they can be dependant on the history of patients and a number of other factors. It was stressed that whatever advice was given it must be safe advice. Members were asked to consider what figures might be included given in certain scenarios. In conclusion Dr Russell said that he with the help of Dr McVeigh would draw up a draft document and he asked each member to produce a 1 page flow chart and forward it to the CREST Secretariat by email no later than 17 May 2002.

Action: All members

5. Date of next meeting

The date of the next meeting has been arranged for Friday, 21 June 2001 at 2.30pm in Annexe 4, Castle Buildings.