Hyponatraemia in hospital populations

Sir,

We were interested to read the article by Bhatnagar and Weinkove on hypernatraemia in a hospital population. They attributed the majority of hypernatraemic episodes to dehydration. If anything then, hypernatraemia should be more common in a tropical hospital, like the one from which we write, sited almost on the equator in an area having a uniformly hot and humid climate. It so happens that we keep a 'panic value' book in which, inter alia, sodium results of greater than 160 mmol/l are recorded, so that it was rather easy to ascertain that in an entire year, 1st August 1987 to 31st July 1988, there were twelve such patients. If such a value is attained or approached the serum is rechecked with an ion-specific electrode instrument, so that the count can be given some credence. The small number contrasts with the 27 recorded by Bhatnagar and Weinkove. Relevant to their study would have been a note of the size of their hospital and perhaps the age-structure of its intake; we had about 500 beds throughout the year of review and take an entirely mixed population. The number of 'panic values', from a loading of 200–300 specimens per day in that period (dangerously high and low sodium, calcium, potassium and glucose) was 1452, or about four per day.

If we do have fewer instances of hypernatraemia here the explanation probably lies in a different social approach to hospital attendance. Few people come in on their own, or are left alone in the absence of friends and relatives for long periods. With an instinct for the rigours of the climate, the attending persons will see that the patient is well hydrated with soft drinks and sips of water. The lack of an awareness of the problem of water balance, as highlighted by Bhatnagar and Weinkove, is, not likely to exist in professional staff working in tropical conditions either.

J.K. Candlish, & T.C. Aw
Clinical Chemistry Section,
National University Hospital,
Lower Kent Ridge Road,
Singapore 0511

References

Studies on patients submitted to sphincteroplasty

Sir,

Sphincteroplasty is a well established treatment of biliary tract and pancreatic diseases. Its major role is the drainage of an obstructed common bile duct, due to chronic inflammatory illnesses or lithiasis.

We report 129 patients submitted to sphincteroplasty, M:F 97:32, aged from 18 to 83 years (mean 47.7). Symptoms had been present for between 3 days and 30 years (mean 8.5 years), mainly pain (60.5%) and dyspepsia (53.5%).

Per-operative manometric studies showed intraductal hypertension, mean 17 cm of water (normal 12 cm of water). Operative cholangiography was abnormal in all cases; the most important findings were common bile duct wider than 10 mm (88.4%) and lithiasis (38%). Biopsy showed normal papilla in 79% and chronic papillitis in 21% of cases.

Thus, besides lithiasis, there are probably functional alterations of the sphincter responsible for the findings on cholangiography. We believe that the common duct and its emptying into the duodenum should be better studied in order to rationalize sphincteroplasty.

Alcino Lazaro da Silva
Andy Petroianu
Department of Surgery – Medical School,
Federal University of Minas Gerais,
Avenida Alfredo Balena, 190,
30130 – Belo Horizonte, MG – Brazil.
Hyponatraemia in hospital populations.

J. K. Candlish and T. C. Aw

Postgrad Med J 1989 65: 58
doi: 10.1136/pgmj.65.759.58