Salt Restriction in Ascites with Cirrhosis of Liver: Will Enhanced Salt Restriction Increase Longevity?

Sir,

Presence of ascites increases the risk of minor complications - hernia, diminished mobility, dyspnoea and major ones such as renal failure, hepatorenal syndrome, spontaneous bacterial peritonitis, hepatic hydrothorax or variceal bleeding. Furthermore, treatment of ascites can also cause complications - electrolyte imbalance, encephalopathy, gynaecomastia (diuretic therapy), decreasing complement and opsonic activity (large volume paracentesis with albumin), deterioration of liver function and/or encephalopathy, shunt occlusion (transjugular intrahepatic portosystemic shunts (TIPS) or shunt surgery), disseminated intravascular coagulation, shunt occlusion, sepsis, (peritoneovenous shunt), operative mortality and morbidity, with lifelong immunosuppressive therapy (liver transplantation).

Since presence of ascites as well as its treatment, increases the risk of complications, attempt should be made to prevent ascites formation and its recurrence.

Salt restriction in diet is the initial and vital step in the management of ascites in cirrhosis of liver. A negative sodium balance is not easy to achieve unless strict salt restriction is emphasized by the physician and followed by the patient. Recommendations for salt restriction markedly vary: 2g salt (NaCl) : (0.8g = 35 mmol sodium), 2g (88 mmol) sodium, 0.5g (22 mmol) sodium per day (1 – 3). Such marked variations (22 – 88 mmol per day) in sodium intake, allow ingestion of much greater amount of salt, resulting in recurrence of ascites. This arbitrarily decided value of 2g sodium or salt while effective in some patients to control ascites, may be responsible for the recurrence of ascites in several patients with Child C cirrhosis.

Our recent observation of absence of ascites in Child C cirrhosis (Child-Pugh score 11: albumin < 2.8 g/dl, bilirubin > 3 mg/dl; prothrombin time: more than 6 secs difference; no ascites, no encephalopathy), with enhanced salt restriction in them (unpublished), indicates strict salt restriction should be widely practiced. The patients were instructed, not to add salt in the diet and take food with low sodium content, to reduce intake to less than 2g salt. Patients when admitted for haematemesis, were administered minimal amount of parenteral saline, to reduce the chance of ascites formation.

A salt restriction of less than 2 g per day will impair the quality of life of some cirrhotic patient due to diminished food intake. However the patients were explained the advantages of diminished cost (fewer blood tests, admissions) and perhaps improved longevity.

With TIPS or shunt surgery, ascites is controlled but longevity is not increased as shunt surgery results in deterioration of liver function test and/or increases the chance of encephalopathy. In contrast, strict salt restriction aids control of ascites, without causing any deleterious effect on liver.

Every Child C cirrhosis patient with persistent or recurrent ascites should be offered an alternative of strict salt restriction rather than 2 g salt intake. In a cirrhotic patient with ascites, liver transplantation improves longevity but it is an option available to a few patients because of its cost, limited organ (cadaver or living related) and competent surgeons availability. Enhanced salt restriction is the only alternative available to the vast majority of cirrhotic patients with ascites in developing countries, to reduce hospital admission and cost and perhaps to improve their longevity. The need for clinical trials, to observe longevity in Child C cirrhosis patients, with 2g salt or less intake, is obvious.

HG Desai
Director Gastroenterology, Jaslok Hospital and Research Centre, Mumbai – 400 026.
Received : 28.2.2006; Revised : 24.4.2006; Accepted : 25.4.2006

REFERENCES

Bilateral Adrenal Metastases from Large Cell Carcinoma of Lung in a Female Non-smoker Patient

Sir,

Bronchogenic carcinoma commonly metastasizes in liver, bone and brain. Besides the above structures, the kidneys, adrenal glands and the skin are the important sites of metastases. Adrenal gland involvement may be unilateral or bilateral.1

A female patient aged 46, staying in the rural area of Midnapur, West Bengal, presented with pain in the back of right lower part of chest for three months, occasional fever for one month and bilateral upper abdominal pain for one month. On clinical examination, the patient was conscious, cooperative and alert. Vital parameters were normal. She had moderate anaemia, no clubbing, skin-pigmentation or lymphadenopathy. The intensity of

Correspondence