

Dietary management of hepatic encephalopathy in cirrhotic patients: survey of current practice in United Kingdom

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In the early 1950s it was shown that some patients with cirrhosis given "nitrogenous substances," including excess dietary protein, developed hepatic "precoma."¹ These largely uncontrolled observations led to the introduction of dietary protein restriction to treat hepatic encephalopathy.

Recent research has shown, however, that protein requirements are increased in these patients,² that high protein diets are well tolerated, and that their use, particularly in patients who are malnourished, is associated with sustained improvement in mental state.^{3,4} In response, the European Society for Parenteral and Enteral Nutrition has recommended that traditional protein restriction should be abandoned in patients with hepatic encephalopathy particularly as other effective treatments are available.⁵ We undertook this survey to review the current dietary management of these patients in hospitals throughout the United Kingdom.

Methods and results

We devised and piloted a questionnaire and then sent it to the 110 UK dietetic departments approved by the British Dietetic Association for training student dietitians. Information was requested on the referral, clinical assessment, and dietary management of all inpatients with cirrhosis and hepatic encephalopathy seen in the past 12 months. The questionnaires were returned anonymously. Closed questions were analysed with descriptive statistics and open questions by content analysis.

Seventy one (65%) questionnaires were returned; 64 departments with relevant experience provided details of the dietary management of 1046 patients. Overall, 759 (73%) patients had had their protein intake restricted to some degree (table). In most of these patients the diets were imposed for prolonged periods because treatment end points were not specified or poorly defined. Over half of the responding departments reported requests to restrict protein prophylactically in cirrhotic patients who were neuropsychiatrically unimpaired.

Overall, 261 (25%) patients were referred with a prescriptive request to restrict protein intake; the remaining 758 were referred with a request for dietary advice that allowed leeway for discussion. Nevertheless, the dietitians still felt that 153 (14%) patients had had their protein intake restricted inappropriately (table).

Difficulties were experienced in maintaining oral intake in many of these patients; 58 (91%) of the responding departments reported substantial problems because of anorexia, 17 (27%) because patients were drowsy or confused, and 12 (19%) because the diets were unpalatable. Nevertheless, less than 25% of

Dietary management of 1046 cirrhotic patients with hepatic encephalopathy. Values are numbers (percentages) of patients

Dietary protein intake (g/day)	Diet instituted	Dietitians' preference
Unrestricted	287 (27)	440 (42)
Moderately restricted (30-50)	419 (40)	499 (48)
Seriously restricted (<30)	340 (33)	107 (10)

these patients received appropriate additional nutritional support.

Comment

This survey shows that despite clear recommendations to the contrary,⁵ most patients in the United Kingdom with cirrhosis and hepatic encephalopathy have their protein intake restricted, often for prolonged periods. Protein restriction is also widespread in patients thought to be at risk of developing hepatic encephalopathy, which has no justification. Many of these patients are anorexic and find the diets unpalatable and hence unacceptable, yet few are given appropriate nutritional support. In general, dietitians are less in favour of restricting protein intake than the referring doctors, but either their views are not expressed or their advice is not heeded.

The widespread inappropriate dietary management of cirrhotic patients with hepatic encephalopathy is likely to adversely affect outcome. Both dietitians and medical practitioners need to be made aware of recent guidelines,⁵ to change current practice, and to work together effectively.

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