Dietary management of hepatic encephalopathy
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complications, being able to talk, walk, and eat before symptoms of hyponatraemic encephalopathy develop. Treatment is simple and should be prompt: the risk of not treating acute cerebral oedema far exceeds the small risk of osmotic demyelination from treatment. Fluid infusions should be restricted to normal or hypertonic saline and sodium concentrations monitored every two hours. The aim is to raise serum sodium by 1-2 mmol/l per hour (depending on the severity of neurological symptoms) until symptoms resolve. A loop diuretic such as frusemide (furosemide) may be used to enhance free water excretion and hasten the restoration of normal sodium concentrations. Iatrogenic hyponatraemia is inexcusable. It is time that doctors woke up to the risks.

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Dietary management of hepatic encephalopathy
Too many myths persist

Myths are difficult to dispel and may delay good evidence based clinical practice. This is illustrated well by a paper in this week’s issue on the dietary management of hepatic encephalopathy in patients with cirrhosis (p 1391). Protein restriction in symptomatic patients with hepatic encephalopathy has been the cornerstone of treatment since the 1950s, yet there is no evidence that it has any clinical benefit.

Hepatic encephalopathy is a syndrome of impaired mental status and abnormal neuromuscular function which results from major failure of liver function. Important factors contributing to it are the degree of hepatocellular failure, portosystemic shunting, and exogenous factors such as sepsis and variceal bleeding. The pathogenesis of the syndrome is still uncertain, although current hypotheses include impaired hepatic detoxification of ammonia absorbed from the gut and an increase in aromatic amines, which are precursors for false transmitters in the brain—for example, octopamine—and which alter the balance between neuronal excitation and neuronal inhibition. Furthermore, increased expression of benzodiazepine receptors in hepatocellular failure suggests that the γ-amino butyric acid-benzodiazepine inhibitory neurotransmitter system may be implicated in the development of hepatic encephalopathy.

Protein restriction as a treatment conveniently began with 20 g protein/day and, with clinical recovery, 10 g increments were introduced every 3-5 days, as tolerated by the patient, to a limit of 0.8-1.0 g/kg body weight; this was considered sufficient to achieve a positive nitrogen balance. This practice continues despite evidence showing that patients with stable cirrhosis have a higher protein requirement than normal, around 1.2 g/kg dry body weight to remain in positive balance.

Protein energy malnutrition, defined by anthropometric criteria, may occur in 20-60% of patients with cirrhosis depending on the severity of the liver disease.
agree with them on the importance of following evidence based guidelines in the dietary and medical management of cirrhotic patients and on the need for a combined approach from hepatologists and specialist diabetians to achieve nitrogen balance without exacerbating neurological symptoms. Furthermore, we need clinical trials to determine markers for assessing when patients should restrict their protein intake and when and at what rate they should return to a more normal diet and maintain nitrogen balance without exacerbating neurological symptoms. At the current state of knowledge it seems sensible to give as much protein (up to 1.5 g/day) to maintain a good nutritional state—a lesson learnt in the dietary management of chronic renal failure 20 years ago.1

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New rules for expert witnesses

The last shots of the medicolegal hired gun

Those clinicians who provide reports for use in the civil courts of England and Wales will find their practice changing over the next few months. There are fresh opportunities for those new to medicolegal work to take on stimulating (and well paid) work, but clinicians with established practices may well lose out.

The civil justice system in England and Wales has just undergone an upheaval. The changes began in 1994 when Lord Woolf was appointed to review the rules and procedures of the civil courts in England and Wales. The aims of the review were (principally) to improve access to justice and to reduce the costs of litigation. Lord Woolf was particularly troubled by the escalating cost of justice and to reduce the costs of litigation. Lord Woolf was particularly troubled by the escalating cost of legal procedures of the civil courts in England and Wales. The Woolf reports have crystallised into a new set of rules for the civil courts of England and Wales will find it more easy to use the rules and procedures of the civil courts in England and Wales. The aims of the review were (principally) to improve access to justice and to reduce the costs of litigation. Lord Woolf was particularly troubled by the escalating cost of legal procedures of the civil courts in England and Wales.

Secondly, the content of clinical reports prepared for the courts will be standardised (the details are available on the BMJ’s website). The most noticeable change is that clinicians will have to set out not only their own professional views, but also those of any other “relevant recognised body of opinion.” This is likely to make the writing of medicolegal reports a lengthier and more demanding process, especially in view of the fact that the courts now expect reports to be well referenced and logical.

Thirdly, the volume of work available for experts is likely to shrink. Expert evidence will only be received by the courts if it is reasonably required to resolve the issues before the court. Severe cost sanctions will discourage the indiscriminate instruction of experts. A further factor reducing the amount of work available is that most evidence will be put to the court in writing: oral evidence from an expert is likely to be the exception rather than the rule.

Fourthly, fees for medicolegal work are likely to fall. The new rules introduce the concept of “proportionality.” This is a nebulous concept, but essentially means that the fees may only be allowed by the court if they are in proportion to the value of the claim. Experts must thus provide value for money. “Cancellation fees” and hourly rates of hundreds of pounds an hour will need robust justification. The rules allow the court to limit the amount that an expert is to be paid.

Despite these changes, the civil court system in England and Wales remains adversarial. This is slightly at odds with the court being advised by “neutral” experts, and it is questionable whether justice will be served by such a system. None the less, the use of