Scheduled appointments for blood alcohol level (BAL) testing may only uncover the most dependent of those who continue to drink. Our transplant unit, with patient consent, conducts community based BAL testing without prior notice as well as breath testing at the time of admission for LT. We evaluated the role of this process in identifying individuals who continue to drink alcohol while claiming abstinance. An update of a retrospective analysis of all patients with a diagnosis of ALD, who were listed for LT from 2006 to 2011, was performed. Patients with a positive BAL and those removed from the WL were identified.

Results 206 abstinent patients with ALD were listed for LT after evaluation for risk of recidivism. Four patients on the WL returned a positive BAL at planned appointments and eight upon testing without prior notice. Seven of the latter patients had previously returned negative tests at planned appointments and all were removed from the WL in line with UK national policy. One patient returned a positive test at the time of admission for LT. In addition, two patients admitted to drinking (1 with positive — but below the usual cut-off — BAL tests) and were removed from the WL.

Conclusion Random BAL testing is a useful tool in identifying ongoing hidden alcohol use in patients with ALD listed for LT. 6.8% of patients with ALD were removed from the WL due to ongoing alcohol ingestion. These patients may have damaged their grafts through ongoing alcohol ingestion and may recover without LT if they were to become abstinent. Identification of these patients is also important in maintaining public confidence in appropriate allocation of scarce donor livers.

Competing interests None declared.

PTU-060 ENTERAL OR PARENTERAL FEEDING IN INTESTINAL GRAFT DYSFUNCTION: ANY CLUES FROM SERUM CITRULLINE?

doi:10.1136/gutjnl-2012-302514c.60


Introduction Citrulline has been successfully used as a marker for intestinal graft dysfunction after intestinal transplantation.1 We have extended its use to direct enteral vs parenteral feeding in the early post operative period as well as during graft dysfunction presenting as high volume stomal effluent.

Methods Weekly serum citrulline concentrations were used in directing nutrition in all recipients of intestinal grafts. A cut off of 13 mmol/l was used. Patients with citrulline levels <13 mmol/l in the post operative period were kept on low volume enteral feed and maintained on TPN. Once the levels were above 13 mmol/l, enteral feeds were advanced to meet target rate and TPN independence was achieved. A similar pattern was followed with patients presenting with high output stomal effluent. These citrulline levels were then matched with histopathological diagnosis.

Results From October 2008, nine patients underwent a small bowel transplant at the Oxford transplant centre. Mean citrulline levels week one after transplantation were 15 mmol/l (range 12–17). Endoscopic biopsies in the first week showed signs of ischaemia reperfusion with significant oedema in the submucosa of the transplanted ileum. All these patients were maintained on TPN and had enteral feed (Peptisorb) at 30 ml/h. As mean citrulline levels increased patients progressed to full feed and TPN discontinued. Four patients presented with intestinal dysfunction after discharge from the hospital. These were all commenced on TPN if the citrulline level fell below 15 mmol/l. The first, had a citrulline of 19 mmol/l on presentation and, biopsy demonstrated acute rejection. The second, presented with a high stomal output with a citrulline level of 9 mmol/l. Biopsy results revealed increased mitotic figures as well as apoptosis and loss of tips of villi architecture. The third patient presented with a high stomal output and a citrulline of 15 mmol/l. Citrulline fell further to 9 mmol/l. The fourth patient presented with a high output and citrulline level of 15 mmol/l, dropping further to 6 mmol/l. His biopsy revealed dense mitotic activity in the face of increased apoptosis. He recovered in a span of 30 days with subsequent citrulline showing a rise. He was then weaned off TPN and commenced on diet. Mean time to graft dysfunction from transplantation was 240 days (range 46–450).

Conclusion Firstly serum citrulline is a good marker to direct nutritional therapy in the early post transplant period as well as during graft dysfunction.

Competing interests None declared.

REFERENCE