Learning from serious incidents related to dialysis

December 2008

Haemodialysis Associated Haemolysis

A cluster of cases of haemodialysis associated haemolysis has occurred in 4 dialysis units in the period August to December 2008 and a potential similar case was identified retrospectively from December 2007. In total there have been 10 cases, 7 identified prospectively and 3 retrospectively. The patients, 8 male and 2 female, ranged in age from 44 to 82 years with the majority in the 50s and 60s, while the 2007 patient was a 23 year old female. All cases were characterised by the development of symptoms during or within a matter of hours of a routine dialysis session and were accompanied by evidence of haemolysis. The majority of the cases had the clinical features of hypertension during dialysis and abdominal pain. Six of the ten cases had evidence of acute pancreatitis, with raised serum amylase and some patients also had radiological evidence of pancreatitis. Two others had abdominal pain but a normal amylase and the remaining two had different clinical features. All patients recovered fully and have not had any recurrence.

Extensive investigation and clinical review has been undertaken to determine a cause. No definite explanation has been identified for any patient. These episodes have not been associated with treatment of the water supply with hydrogen peroxide or any other chemical. Investigation has been undertaken by individual Trusts, the Adverse Incident Centre, two haemodialysis machine manufacturers, and there has been involvement of the MHRA.

A number of steps have been taken to ensure patient safety. All patients have been provided with information, reassurance about the general safety of dialysis and advised on what to do if they develop symptoms suggestive of a similar problem. Dialysis unit staff have been informed and asked to increase their vigilance for any further episodes. GPs and A&E Departments have received information and guidance. All dialysis lines, kidneys, etc are being bagged, labelled and retained for 12 hours after each treatment in case a further case occurs, thus permitting appropriate investigation.

We would be grateful if renal units could inform us of any similar episodes that have occurred in other units, and for any suggestions of potential causes for such episodes.

Please submit comments, solutions, and personal experience to:

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