

## **Effect of early blood transfusion on gastrointestinal haemorrhage**

Mr S. D. Blair, S. B. Janvrin, C. N. McCollum, R. M. Greenhalgh  
*British Journal of Surgery* 73(10), Pages 783 – 785, 1986

The effect of citrated stored blood on coagulation was studied initially in a pilot study where 25 patients with acute severe gastrointestinal haemorrhage had their whole blood coagulation measured using the Biobridge Impedance Clotting Time (ICT). This demonstrated that there is a hypercoagulable response to haemorrhage which was partially reversed by blood transfusion. Similar changes were noted in Kaolin Cephalin Clotting Times (KCCT). A further 50 patients were then randomized to receive, during the 24h after admission, either at least 2 units of blood or no blood transfusion unless the haemoglobin fell below 8 g/dl or they were shocked. In the transfused group nine patients re-bled compared with only one in the non-transfused group ( $P < 0.01$ , 2 with Yates' correction). Early blood transfusion appears to reverse the hypercoagulable response to haemorrhage thereby encouraging rebleeding and hence the need for an operation.