## Autologous Blood Transfusion

Sir

We are grateful to messers Spark, Chetter, Kester and Scott (*Eur J Vasc Endovasc Surg* 1997; **14**: 482–486) for reminding us of some of the potential benefits of autologous blood transfusion and potential harmful effects of giving heterologous blood in the perioperative period. We have recently performed an audit as a pilot to a larger prospective study also concerning autologous transfusion but concentrating the use of acute normovolaemic haemodilution (ANH) rather than salvaged blood.

Of 72 randomly selected patients undergoing routine abdominal aortic aneurysm repair, 32 had ANH. We documented demographic details, pre- and post-operative haemoglobin concentration and PCV, pre-operative blood loss, cross-matching and transfusion requirements, morbidity, mortality and length of hospital stay. Using the Bonferroni correction for multiple statistical analyses the only significant differences were in the number of units of blood cross-matched pre-operatively (median 4 units vs. 6 units; Mann–Whitney $p=0.0035$) and the number of units transfused pre-operatively (median 0.5 units vs. 2 units; Mann–Whitney $p=0.0065$).

We believe our study raises an important issue not highlighted by the group from Leeds; one of cost. Economic analysis revealed a saving of at least £70 per patient when ANH was used. This, in addition to potential physiological advantages not studied by Spark *et al.*, such as oxygen carrying capacity, warrant further basic research into ANH and autologous transfusion.

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No reply received.