

What is already known on this topic

Reduction of leucocytes in red blood cell concentrates by filtration results in less alloimmunisation in patients receiving transfusions and transplants

In patients undergoing cardiac surgery and transfused with at least 4 units the use of filtered red blood cells reduces postoperative infections and mortality

The use of filtered red blood cells has also been shown to reduce postoperative infections in patients undergoing colorectal surgery

What this study adds

The use of filtered red blood cells results in a shorter stay in hospital and a lower incidence of multiorgan failure in patients undergoing major vascular or oncological surgery

Mortality was lower in the subgroup of patients undergoing gastrointestinal oncological surgery

Dutch healthcare system, with 16 300 aneurysm and gastrointestinal procedures a year, a mean reduction of 2.4 days in hospital would reduce the national hospital costs by €29.5m/year (£19.6m, \$35.0m). In the Netherlands the annual cost of universal leucocyte depletion of red blood cells is about €20m (assuming filtration costs of €40/unit). The reduced mean hospital stay associated with filtered products could, to a large extent, compensate the extra cost of filtration in the Netherlands. In other countries where standard whole blood transfusion has been compared with filtered red blood cells, implementation of filtration seems to be cost neutral or cost saving in some settings.^{14 15}

Conclusions

Although we had to stop recruiting patients before we reached the desired study size, results for some end points had reached significance. Leucocyte reduced transfusions in this group of patients undergoing major surgery significantly reduced the incidence of multiorgan failure and length of hospital stay. Our results also contribute to the discussion of the cost effectiveness of using filtered red blood cells.

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Competing interests: None declared.

Ethical approval: The protocol was first approved by the ethics committee of the Medical Spectrum Twente recognised by Dutch Central Council for Medical Research (CCMO) and subsequently endorsed by all ethics committees of the other participating hospitals.

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Corrections and clarifications

Alcohol limit for drink driving should be much lower
We inadvertently introduced confusion over the blood alcohol concentrations in this letter by Ediriweera B R Desapriya (10 April, p 895). Near the start of the second paragraph, the range should be 0.8 mg/ml to 1.0 mg/ml. The legal limit cited later in that paragraph is 0.8 mg/ml, and the risk of a crash increases above a concentration of 0.2 mg/ml. In the final paragraph, the concentration should again have been cited in mg/ml (as 0.8 mg/ml).

UK academy wants neuroscience research to benefit patients more quickly

In this News Extra article on bmj.com by Chibuzo Odigwe, we wrongly referred to Ray Tallis as the president of the Academy of Medical Sciences (<http://bmj.bmjournals.com/cgi/content/full/328/7443/790-a>). He is in fact the secretary of the academy's working group that produced the neuroscience report that was discussed in the article.

Patient power?

An editing slip in this Personal View by Frank Arnold last year (*BMJ* 2003;326:1042) reveals an apparent ignorance on our part of the difference between anal and oral orifices. In the second sentence of the second paragraph we should have expanded the author's original term ("barium") to "barium enema" (not "barium meal").