


4 Lobo DN, Stanga Z, Aloysius MM, et al. Effect of volume loading with 1 liter intravenous infusions of 0.9% saline, 4% succinylated gelatine (Gelofusine) on blood volume and endocrine responses: a randomized, three-way cross-over study in healthy volunteers. Crit Care Med 2010; 38: 464–70
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Reply from the authors

Editor—We thank Dr Hahn for his letter on our Clinical Investigation.1 We agree that determining changes in blood volume through calculations derived from haematocrit changes is not an ideal situation. However, there is presently no other methodology that could be easily utilized to determine such acute serial changes in blood volume as would be required in a clinical investigation such as ours. Specifically, the use of radioisotope tracers in patients undergoing surgery would not be feasible. Furthermore, as we used the same equations to determine changes in blood volume after infusion of both fluids, any error inherent in the equations would be applied to both arms of the study. Rather than the absolute values derived, it is the relative changes in blood volume that are of importance in this comparative clinical investigation. We did, however, note a typographical error in one of the formulae described in our manuscript. The incorrect formula on page 170 should be replaced with the correct one as described in our previous manuscript.2

The incorrect formula
\[ \Delta BV_t(\%) = BV_0 \left( \frac{\Delta Hct_t}{Hct_t} \right) \times 100 \]

The correct formula
\[ \Delta BV_t(\%) = \left[ \frac{100}{100 - \Delta Hct(\%)} \times 100 \right] - 100 \]

However, the formulae utilized in the spreadsheets for calculations were the correct ones. Hence, while we apologize for this error, we would like to state that this did not affect the results of our calculations.

Declaration of interest

None declared.

S. Awad*
D. N. Lobo
Nottingham, UK
‘E-mail: sherif.awad@nottingham.ac.uk

1 Awad S, Dharmavaram S, Wearn CS, Dube MG, Lobo DN. Effects of an intraoperative infusion of 4% succinylated gelatine (Gelofusine®) and 6% hydroxyethyl starch (Voluven®) on blood volume. Br J Anaesth 2012; 109: 168–76

2 Lobo DN, Stanga Z, Aloysius MM, et al. Effect of volume loading with 1 liter intravenous infusions of 0.9% saline, 4% succinylated gelatine (Gelofusine) and 6% hydroxyethyl starch (Voluven) on blood volume and endocrine responses: a randomized, three-way crossover study in healthy volunteers. Crit Care Med 2010; 38: 464–70
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