Comment on Debate: Blood is Friend or/and Foe?

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Dear Editor,

I read the “Debate” section on the blood transfusion, published in the June 2017 issue. Both the articles were very informative and quite interesting too (1, 2).

I have some comments on the article written by Dr. Can İnce (1) and wish to add few points.

The author had emphasized the role of recent developments in the preparation and storage of blood products on the safety, in comparison to the older methods. I fully agree with the author that “leuco-reduction” had certainly reduced the complications considerably, associated with the transfusion of blood products. I’m sure that many people would have got enlightened about the positive aspects of “leucodepletion” after reading the “point-blank” writing by Dr. Can İnce (1).

I have some specific points with regard to the author’s comment on the comparison of the two articles published in the NEJM wherein the author stated that “take home messages of such large RCT relating to blood transfusions being published in the NEJM in complete disarray”.

The author had not only failed to quote the reference number [i.e #11] in this sentence with regard to the article by Holst LB et al, but also misquoted the reference in the bibliography which was published in the “Trials” journal in 2013 (3), instead of the completed study, published subsequently in NEJM in 2014 (4).

Holst LB et al had stated that they were not certain whether “leuco-depletion” was the causative factor in their observation of “no harm” in patients who received “excess transfusion” with a median of three units of blood (4).

The author’s statement that a “landmark study by Hilten et al. (5), observing non-leuco-reduction being the cause for increased incidence of multiorgan dysfunction, infection and length of hospital stay” is not matching with regard to infection. Hilten et al. (5) observed shorter mean length of hospital stay [-4.8 to 0.0 day; p=0.050], and lower incidence of multi-organ failure [odds ratio 0.70, 0.49 to 1.00; p=0.050] in the “leuco-depleted” group. The rates of infection did not differ between the two groups [0.98, 0.73 to 1.32]. However, Hilten et al. (5) have mentioned [based on their previous three studies], that they found a reduction in postoperative infections in cardiac surgery patients who had received more than 3 units (5). They also stated that the reduction in infections were observed in single centre trials rather than multicentre trials, because of factors like hospital policies, surgeons, patients, and registration (5).

Further, a meta-analysis published in the same year i.e. 2004, had observed that leucoreduction might reduce the rate of postoperative infections (6).

Lacroix et al. had studied the effects of age of red blood cells in critically ill patients (7), not in cardiac surgery patients as mentioned by the author (1).

After reading this debate, it is acceptable for me that “leuco-depletion” would have caused the lesser incidence of complications in this century, as substantiated by Dr. Can İnce (1), citing many references for that point. Indeed, to my knowledge, nobody had emphasized the positive aspects of blood transfusion, like Dr. Can İnce.

Hence, I believe that it is safer (friendlier day by day rather than foe) to transfuse the blood products in the current situation where “leuco-depleted products” are more commonly used.

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References

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