Audit of Blood Requisition

Dear Editor,

This is with reference to the article titled "Audit of Blood Requisition" MJAFI 2001;57:35-8.

The authors have pointed out that there were 1697 i.e. 60.71% demands for single unit blood and the total issues were 1099 i.e. 33.34% of the entire demand. Out of this 713 i.e. 64.88% were single issue but unfortunately the authors have missed the fact that utilization of single unit demand is only 42.01% i.e. 713 out of a total demand of 1697, probably indicating the extra cautious nature of surgeons and anesthesiologists to cater for unforeseen circumstances during surgery. We would like to inquire from the authors as to the break up of single unit blood demand, department wise and whether the surgeries were elective or emergencies.

It is surprising to note that in a Service Zonal Hospital in a time span of 5 years i.e. from 1995 to 1999 only 10 cases of autologous blood transfusion were carried out whereas more than 80 autologous transfusions were done in another Service Zonal Hospital in a span of 2 years [1]. Pre-operative autologous donation and acute normovolemic haemodilution are very safe, viable and practicable alternatives to allogenic transfusions. Single unit transfusion must be

avoided. The onus for dissemination of the information and advantages to the patients lies on the medical and para medical staff [2].

This is a small peripheral hospital looking after battle casualties due to militancy trauma. We have transfused 159 bottles of blood to 72 patients during this period out of which 34 i.e. 21.38% were single unit and 5 i.e. 3.14% were autologous transfusions. Since we are dealing mainly with trauma cases, the criteria adopted by us for placing demand for blood are:

- Hb < 8gm/dl after resuscitation
- If substantial bleeding is anticipated during surgery.

References

- Gokhale S, Roy PS, Ashok Y, Fallero JJJ. Homologous Blood transfusion: Do we have any alternatives? MJAFI;2000;56(2):122-4.
- Machave MV. (Editorial Comment). Autologous transfusion - The safer alternative. MJAFI 2000;56(2):93-4.

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Reply

Dear Editor,

I thank Maj Jaswinder Singh for reading the article titled "Audit of Blood Requisition" and reflecting his views.

1. The aim of the study was to evaluate the rate of inappropriate transfusions, to explain the risks associated with it and suggest means of avoiding the same. By preventing single unit transfusions, the risks (i.e. transfusion reactions, transfusion transmitted diseases and sensitisation), the cost factor and workload related to transfusion can be substantially reduced and we can conserve blood for more appropriate demands. We tried to highlight this fact, by comparing single unit demands as compared to total demands received (60.71%) and single unit transfusions as compared to total transfusions administered (64.88%). All figures are in terms of number of demand forms, i.e. number of patients. In other words, 64.88% of the patients who were transfused during the period of the study, had been exposed to inappropriate transfusions and to the risks associated with it [1].

2. Maj Jaswinder Singh, has quoted a figure of 21.38% of single unit transfusions in his hospital. But if we evaluate in terms of patients, 34 out of 72 (47.22%) patients were exposed to single unit (i.e. inappropriate) transfusion. Most of the blood banks of the service hospitals tide through emergencies by bleeding donors and transfusing "fresh blood". The practice of transfusing fresh blood has its inherent risks and this should motivate us further to avoid inappropriate transfusions. No clinical criteria can justify single unit transfusions [1,2].

3. Majority (56.21%) of the blood requisition forms (IAFD-87) did not have a mention of the priority (i.e. most urgent /urgent/ not urgent) of transfusion. Hence, it was not possible to evaluate the clinical scenario warranting the transfusion. A department wise breakup of single unit transfusions is reflected in Table 1.

Table 1

Department wise distribution of cases who were administered single unit transfusion between June 1995-1999

Department	Percentage of cases
Medical Div (Medicine, Paediatrics, Dermatology)	36.97%
Haematological cases	24.24%
Non Haematological cases	12.73%
Obstetrics and Gynaecology	36.33%
Gynaecology cases	22.76%
Obstetrics cases	13.57%
Surgical Div	26.70%

4. The extremely low figures of only 10 cases from 1995-99 had given us the impetus to popularise autologous transfusion (preoperative autologous donation PAD). The data is reflected in Fig 1. By conducting regular interactive programmes with the health care workers and the patients we could achieve 35 autologous transfu-

Fig. 1: Rate of collection of blood for autologous donation