

Correspondence

Autologous blood and cardiac surgery

To the Editor:

Since 1991, an autologous blood programme for elective surgery has been available here.¹ Preliminary experience showed that 14% of 66 autologous donors undergoing cardiac bypass surgery had received no allogeneic red cells but had received allogeneic products other than red cells.² It was suggested that, if autologous blood programmes were to have an impact on patient exposure to allogeneic blood products in cardiac surgery, critical appraisal of the need for transfusion of blood products was essential. The results of the study were communicated to medical staff and a further assessment of blood and blood product use in autologous donors undergoing cardiac surgery was conducted from September 1994 to December 1995, during which time 59 of 700 patients undergoing cardiac surgery had autologous blood available.

The exposure of autologous blood donors to various non-RBC allogeneic products during both periods of study is compared in the Table. There was a reduction in the number of autologous donors receiving allogeneic non-RBC product, both those receiving allogeneic RBC and those receiving no allogeneic RBC.

TABLE Exposure of autologous blood donors to non-RBC allogeneic blood products in 1991-93 and 1994-95

Blood product used	Patients receiving no allogeneic RBC	Patients receiving autologous and allogeneic RBC
1991-93 (n = 66)	n = 9	n = 17
- Platelets	5, 5, 5, 6, 6, 6, 6, (7)	1, 3, 5, 6, 6, 6, 12, 12, 18
(10)		
- Plasma	2, 4 (2)	2, 2, 2, 3, 4, (5)
- Cryoprecipitate	8 (1)	8, 8, 8, 8 (4)
1994-95 (n = 59)	n = 1	n = 3
- Platelets	6 (1)	5, 5, 5 (3)
- Plasma	-	4, 4 (2)
- Cryoprecipitate	-	8 (1)
Statistical analysis	Chi ² 4.52, P < 0.04	Chi ² 8.43, P < 0.005

Individual numbers represent number of "donor exposures" for each patient. (e.g., "Platelets 6 (1)" represents a transfusion of platelets derived from 6 donors to one patient). The number of patients in each group is given in parenthesis. Some patients received more than one non-RBC allogeneic product.

The reasons for the change cannot be ascribed simply to audit and "feedback" of information, since these changes have occurred in a climate of increased awareness of the potential hazards of transfusion, increased educational efforts to limit donor exposure and possibly increased use of haemostatic measures. Nevertheless, re-audit appears to indicate a shift in transfusion practice towards reduced donor exposure and provides evidence of a new "benchmark" for allogeneic blood product exposure in cardiac bypass surgery.

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REFERENCES

- 1 Pinkerton PH. Two-years' experience with a Canadian hospital-based autologous blood donor programme. *Transfus Med* 1994; 4: 231-6.
- 2 Pinkerton PH. Autologous blood donation in support of cardiac surgery: a preliminary report on a hospital-based autologous donor programme. *Can J Anaesth* 1994; 41: 1036-40.

Occipital alopecia after cardiac surgery

To the Editor:

We have observed alopecia in four patients after open heart surgery. They included a nine-year-old boy undergoing repair of VSD with a bypass (CPB) time of 72 min (Figure); a 54-yr-old man for CABG (CPB time 130 min); 51-yr-old man for double valve replacement (CPB time 1120 min); and a 42-yr-old man for AVR (CPB time 60 min). Patients undergoing the longer CPB times developed permanent alopecia.

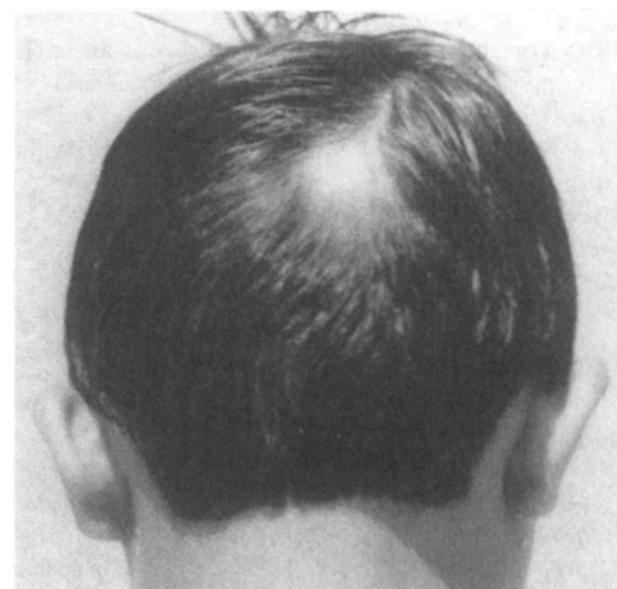


FIGURE Area of temporary alopecia developed on 10th day after surgery.