NHS BLOOD AND TRANSPLANT

CARDIOTHORACIC ADVISORY GROUP

Unused Donor Lungs

Overall Picture for 2013

Reasons for non-use of lungs over the whole calendar 2013 are presented (table 6). The numbers are for individual single lungs, so the actual number of donors in each category is effectively half of what is shown.

Very large numbers are turned down on the basis of function and history. For gratifyingly few are the reasons logistical, such as transport difficulties or centre already transplanting. Similarly, very few are not used because of damage.

Function, in particular, was the commonest reason given, with lungs from over 250 donors turned down on that basis alone.

Analysis for December 2013

A more detailed analysis was then done of actual donors in a calendar month.

In December 2013, there were 57 donors where lungs were offered but not used
35 were smokers.
Retrieval teams attended in 28 instances, so 29 were not attended by either retrieval team or Scout.

Of these 29, the mean highest PO2 was 35, and 14 had a PO2 over 40. Their ages were evenly distributed, so 4 were less than 30, and only 2 more than 60.

A Smoking history is commoner amongst donors with lungs not used – over 60% were smokers. But 22 pairs of lungs were not used. 9 of these had a maximum PO2 of greater than 40. Every one of these donors was blood group A.

Common reasons for turn down across all centres were “poor function” and “donor history”. The latter can only be assessed by looking at individual donors, but function is best reflected by donor PO2. It does seem that other aspects, such as age or smoking are being used as major determinants in the decision not to use lungs.

As an example, on December 22 there was a 58 year old smoker, height 168cm, blood group O max PO2 51. Reasons for turn down are known for 5 centres, and were poor function in 4, size in one.

At a time when there remains a substantial waiting list mortality for lung transplantation, it does seem that there are large numbers of lungs, reaching widely acceptable criteria, that are not even being examined.
Many centres carry out audit of organ offers. It would be useful to know if these national finding reflect local experience?
The specific issue of blood group A lungs also deserves thought. Should recipient criteria be widened for these recipients?