

NHS BLOOD AND TRANSPLANT
CARDIOTHORACIC ADVISORY GROUP

HEART DECLINE AUDIT
SUMMARY

INTRODUCTION

1. This report presents cases of a subset of potential heart donors who donated at least one solid organ between 1 April 2013 and 30 June 2013, but whose heart was not transplanted. The characteristics of this particular subset of potential donors, however, would generally suggest that the heart was transplantable. The most common reason centres declined the heart is provided.

DATA AND METHODS

2. Data on all UK potential heart donors after brain death (DBD) between 1 April 2013 and 30 June 2013 were obtained from the UK Transplant Registry.
3. A subset of potential heart donors was selected using criteria chosen to reflect a group of donors whose hearts were potentially straightforward to place. However, the key criterion was that the heart was not transplanted. Characteristics of each donor in this subset are presented in **Table 1**.

CONCLUSIONS

4. In a recent 3 month period, there were 14 'potential heart donors' in the UK where the heart was not used.
5. Of the 14 potential heart donors, all hearts were offered, 4 hearts (29%) were accepted, and in 10 cases (71%) retrieval teams were sent out. The most common reasons for non-use in this subset of potential donors were poor function and unsuitable donor past history.
6. Members are asked to discuss these cases and consider whether heart usage can be improved in such cases.

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DATA AND METHODS

2. Data on all UK potential heart donors after brain death (DBD) between 1 April 2013 and 30 June 2013 were obtained from the UK Transplant Registry.
3. For the purposes of this study, UK DBD donors were identified as 'potential heart donors' using the following criteria. These criteria were chosen to reflect a group of donors whose hearts were potentially straightforward to place;
 - Blood Group O. Hence the donor's heart could be transplanted to a patient of any blood group.
 - Weight greater than 65kg
 - Between the age of 16 and 65
 - Donated at least one solid organ. This criterion removes donors who were not suitable for donating any solid organ; including these in the analysis would be misleading.
 - Consent for heart donation had been provided.

However, the key criterion was that the heart was not transplanted.

4. The overall reason for non-use was obtained for each donor by looking at the reasons for decline from all (non-paediatric) centres.

RESULTS

Donor characteristics

5. There were 14 UK DBD 'potential heart donors' between April 2013 and June 2013 whose heart was not transplanted. This compares with a total of 32 hearts offered for this group of potential donors over this period. The basic characteristics of these 14 potential heart donors are summarised in **Table 1**.

Table 1 Characteristics of 14 UK DBD potential heart donors between 1 April 2013 and 30 June 2013 whose heart was not transplanted

Donor	Month	Donor height	Donor weight	Donor age	Heart accepted?	Retrieval team attended?	Attending retrieval team	Heart offered?	Reason for non-use
1	April	164	75.0	47	yes	yes	Scotland MO team	yes	Donor unsuitable - size
2	April	167	90.0	50	yes	yes	Papworth CT team	yes	Donor arrested
3	June	158	80.0	49	yes	yes	Papworth CT team	yes	Poor function
4	June	190	113.0	58	yes	yes	Scotland MO team	yes	Other disease
5	April	157	86.0	17	no	yes	Birmingham CT team	yes	Donor unsuitable - size
6	April	193	75.0	29	no	yes	Manchester CT team	yes	Poor function
7	April	157	90.0	61	no	yes	Birmingham CT team	yes	Donor unsuitable - past history
8	April	178	105.0	54	no	yes	Papworth CT team	yes	Poor function
9	May	174	70.0	53	no	yes	Scotland MO team	yes	Poor function
10	June	180	67.0	49	no	yes	Papworth CT team	yes	Poor function
11	April	169	95.0	62	no	no		yes	Donor unsuitable - past history
12	May	166	75.0	30	no	no		yes	Donor unsuitable - virology
13	May	163	70.0	64	no	no		yes	Donor unsuitable - past history
14	June	162	85.0	64	no	no		yes	Donor unsuitable - past history

- 6 Virology was stated as the reason for non-use for donor 12. Specifically, donor 12 was recorded as positive for Hepatitis B Core Antibody and Hepatitis C.
- 7 Four donors were listed as unsuitable due to past history. **Table 2** shows the detailed notes recorded for each.

Table 2 Detailed notes for each donor listed as unsuitable due to past history	
Donor	Notes
7	Left knee replacement 5 months ago and associated arthroscopies prior to this, Tennis elbow and right corrective surgery to this 2008, UTI's, spondolosis, HTN, NIDDM, hiatus hernia, hypothyroidism, nephrectomy 2009 for mild rotated kidney which functioned at 18% and recurrent pyleonephritis and pain with associated pyuria and significant vasomotor symptoms. hysterectomy 1985, Caesarean x 2, appendicectomy, viral meningitis 1999, blood transfusion post partem 1982, arthritis and fibromyalgia. Takes omeprazole, tramadol, co-codamol, candesartan, bendroflumethazide, atenolol, amitriptyline, tamsulosin. Father had age related IDDM. No alcohol, smoked cigaretted approx 20 years ago
11	Gave up smoking 4 years ago. 1/52 - treated for a chest infection with amoxicillin and prednisolone. Patient is asthmatic - symbocort and salbutamol. Carotid endarterectomy 2008 DHx Dipyridamole 100mg TDS Pravastatin 40mg Aspirin 75mg
13	Recurrent Bilateral Hydradenitis Supperitive since 1986. Haematemesis 1995 - Endoscopy showed gastritis, duodenitis and oesophagitis with severe atypia due to excess alcohol intake. Diagnosed Diabetic in 1995 (tablet only), transferred to insulin (Novomix 30- daughter thinks 32-34 units BD) in 1999 - very poorly controlled, notes state patient only takes insulin when she feels she needs to. 2000 - Peripheral neuropathy. 2010 - Lump - upper outer quadrant of left breast - excision - mixture of sclerosing adenosis, benign calcification, fibrocystic disease and hyalinisation. No sign of atypia or malignancy.
14	Within the last six months whilst undergoing checks for life insurance purposes he was told he had a derranged result in his LFT's,wife unsure of details but states that it was wondered if it was as a result of excess etoh but that he was not a heavy drinker. Pt was seen by a private specialist at unknown private hospital and told he had a congenital liver malformation. (2-3 units a day socially) states had no symptoms or issues as a result of this. Unable to gain further information as GP practice not open. CT chest states that "the liver enhances homogeneously. I note that the right lobe of the liver is smaller than the left.Is there a relevant past medical history?"

CONCLUSIONS

- 8 In a recent 3 month period, there were 14 'potential heart donors' in the UK where the heart was not used.
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