

<b>NHS BLOOD AND TRANSPLANT</b>
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**PAEDIATRIC RETRIEVALS FROM EUROPE****Cardiothoracic Advisory Group – April 2015****Executive Summary**

This briefing paper is in response to a risk raised by Great Ormond Street Hospital (GOSH) that they will have to reject cardiothoracic organs for their recipients as there is no formal system in place to enable a NORS team (or European team) to retrieve cardiothoracic organs from donors whose weight is greater than 30 kg.

GOSH is not commissioned to provide a retrieval service and the current processes for retrieval from non-UK donors could lead to the team having to reject organs (if no team is available to retrieve on behalf of GOSH).

This risk is very low in the Eurotransplant zone, in France and in the Republic of Ireland as activity shows local teams have been available to retrieve on behalf of GOSH (see Table One).

The risk is increased in Malta, Scandinavia and southern Europe, where there is no formal process in place to enable retrievals from larger donors.

The paper outlines the current situation, describes the issues with the process and presents several options for consideration. This paper was discussed at the National Retrieval Group (NRG) in November 2015 – NRG asked for this to be shared with CTAG for consideration and advice.

**Background**

GOSH is not and has never been formally commissioned to provide a retrieval service – the team did not bid to provide a NORS service although in the past they have tried to cover retrievals wherever possible, often using locums, subsuming the associated costs. This is not sustainable, due to the financial impact on the trust, the lack of governance associated with the team retrieving and the risk of relatively inexperienced surgeons (locums) carrying out organ retrieval.

There are several scenarios under which GOSH could accept organs for transplant into their recipients:

Scenario 1 – UK donors (<30 kg)

Specialist skills are required to perform retrieval from infant donors. Donors will be attended by Newcastle in the north of the UK and Papworth in the south. No issues with this scenario.

Scenario 2 – UK donors (>30 kg)

These donors will be attended by a NORS team for any UK recipient centre. No issues with this scenario.

Scenario 3 – EU donors (<30 kg)

Donors will be attended by Newcastle for any UK recipient centre. Minor risk that if Newcastle is unavailable there is no second-on team identified.

Scenario 4 – EU donors (>30 kg)

Either the accepting cardiothoracic team retrieves their own organs or the local European retrieval team will do so on behalf of the accepting centre. There are some regional variances:

- In France (where they do not perform transplants on very small recipients) the Agence de Biomedecine will try to find a team available to retrieve the organs on behalf of the UK (or other European) recipient centre.
- In the Eurotransplant zone, there is discussion between the donor and recipient centres and agreement reached as to who will perform the retrieval.
- There is no system in place to cover retrievals from Maltese, Scandinavian or southern European donors – this is a risk.

**Activity**

Between 1 April 2013 and 31 March 2014, GOSH accepted organs from seven European donors (see Table One below). In the cases where GOSH retrieved, the retrieval should have been carried out by Newcastle, as these donors weighed <30 kg.

Table One – GOSH transplants from non-UK donors:

Donation Date	Donor ID	Donor Age (years)	Donor Weight (kg)	Donor Country	Organ	Retrieval Unit
09/04/2013	101793	0	7	France	heart	France
08/05/2013	102287	1	12	R Ireland	lungs	Newcastle
21/07/2013	103590	28	85	R Ireland	heart	Dublin
16/09/2013	104532	0	4	Eurotx	heart	Eurotx
30/09/2013	104773	1	10	Switzerland	lungs	GOSH
09/11/2013	105377	4	22	R Ireland	heart	GOSH
07/02/2014	106798	0	4	Eurotx	heart	GOSH

The data above suggests there is a robust system in place for retrieval from paediatric donors in France and the Eurotransplant zone.

However, in May 2014, the team at GOSH received an offer for organs from a 12 year old donor in Malta whose weight was 60-70 kg. No special skills would be required for such a retrieval, but this did highlight the fact there was not a process in place to facilitate retrieval. Fortunately in this case, the Newcastle team agreed to attend.

Historically, there have also been donors in other parts of southern Europe, Scandinavia and Switzerland where the retrieval has been unable to occur – however, we do not have hard data on these cases.

Although there have been no actual cases where GOSH has had to decline organs due to the unavailability of a team, there is a risk that should the team receive further offers from Malta, Scandinavia or southern Europe, organs from approximately four donors per year could be declined.

## **Summary of Issues**

There is a system in place to enable retrieval of organs from paediatric/infant donors (<30 kg) in the UK and in Europe.

The accepting centre currently retrieves organs from donors >30 kg – no issues if the centre is also a NORS team (all adult cardiothoracic centres).

However, GOSH is not commissioned to provide a retrieval service and may be unable to accept organs from some European donors >30 kg (which would have been suitable for their recipients) as there is not a formal process in place to enable the organs to be retrieved.

In addition, in the unlikely event Newcastle is unavailable to retrieve from paediatric (<30kg) donors, there is no second-on team to do this.

Although the French and European teams will make every effort to retrieve organs on behalf of UK centres, there is a very small risk that if they are unable to do so, GOSH would have to reject the organs for their recipient.

## **Options**

### Option One: do nothing

Although there have been no occasions where GOSH had to decline organs due to no available retrieval team there is a risk this could happen if the European teams are unable to retrieve on their behalf. If the donor is outside the Eurotransplant or French zones, eg in Malta, Scandinavia or southern Europe, there is no system in place to facilitate retrieval.

The Agence de Biomedecine in France has advised that their allocation platform can always be approached to see if a retrieval surgeon can be found. The Eurotransplant teams will discuss the requirements with the recipient centre and make arrangements for the retrieval to take place.

The only action proposed with this option is to ensure the communication channels are very clear so that UK recipient centres are aware that a team in Europe would retrieve. Arrangements would need to be made to ensure there is a clear communication and mobilisation process, and this could be explored with the Duty Office (who now have oversight of all UK retrieval teams' availability).

#### **Advantages:**

- no change in process, therefore all teams clear on their responsibilities
- system has worked well in the past

#### **Disadvantages:**

- potential for GOSH rejecting organs if no retrieval teams are available
- risk that GOSH will continue to send a team if no other centre available, resulting in financial pressure to their trust.
- no system in place to cover retrievals from some European donors

Option Two: replicate the NORS on-call system for all EU donors (>30kg).

With this option, each team could do a month on as first team, with the rest of the teams as back-up, rotating through the sequence (reflecting the current zonal NORS arrangements). Every team would do two months/year.

**Advantages**

- equitable
- ensures there is back up if first team unavailable
- GOSH patients not at risk of being disadvantaged.

**Disadvantages**

- teams could be unavailable for their zonal recipients (although another UK team is likely to be available)
- would need buy-in from all NORS teams

Option Three: extend the criteria for Newcastle to include retrievals on behalf of GOSH from non-paediatric donors in Europe/in the event the local European team is unavailable.

With this proposal, there could be an impact on Newcastle's availability to attend paediatric donors in the north of the UK, although the current system means that in these cases Papworth would be asked to attend.

**Advantages**

- current system of Newcastle retrieving from donors <30 kg works well
- activity for these donors would be relatively low (approximately four per year)

**Disadvantages**

- impact on Newcastle's primary zone due to extended flight times associated with additional activity
- no back up team available for Europe if required
- impact of increased activity on Papworth (who would cover UK paediatric donors).

Option Four: as option three above, but add an additional team to ensure back-up is in place.

**Advantages**

- again, current system of Newcastle retrieving from donors <30 kg works well
- this system would ensure there is a second-on team to cover European paediatric donors if Newcastle is unavailable.

**Disadvantages**

- less equitable than option two (who would be the second team and how would this be decided?)

**Recommendation**

CTAG is asked to consider the risks associated with the current service, to review the options and to recommend a preferred option in line with the principles of NORS.