

#### **Private & Confidential**

Ref: OMcG/JF/SW

12th August 2019

HM Senior Coroner ME Hassell Poplar Coroners Court 127 Poplar High Street LONDON E14 0AE Clinical Governance Team Newcastle Blood Centre Holland Drive Barrack Road Newcastle upon Tyne NE2 4NQ

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Dear HM, Senior Coroner, ME Hassell

Re: Regulation 28 Report, 19th June 2019

On behalf on NHS Blood and Transplant (NHSBT), and The British Transplantation Society (BTS), we would first like to take this opportunity to offer our condolences to the family and friends of Tien Dong Phung following his death at the Royal London Hospital on 25 December 2018.

We are providing a joint response on behalf of NHSBT and BTS as we work closely and collaboratively together within transplantation. Professor is responding on behalf of NHSBT as he is the Medical Director for the Organ Donation and Transplantation Directorate.

We note the matters of concerns;

- 1. Strongyloides stercoralis forms are not routinely screened for prior to transplant surgery. If identified early, they are treatable
- 2. Strongyloides hyperinfection syndrome presents with non-specific symptoms such as abdominal pain, vomiting, intestinal obstruction, cough, wheezing and chest pain. It can evolve into respiratory distress and multi-organ failure
- 3. Strongyloidiasis is estimated to affect up to 300 million people worldwide. The infection is particularly prevalent in tropical and subtropical regions including a number of travel destinations such as Thailand and Brazil. Mr Phung was born in Vietnam but had lived in the UK for many years

We will respond to the matters of concern as noted above as 1,2 & 3.

## **Background**

### 1. Transplant Recipient Screening

The BTS represents all professionals involved in transplantation in the UK and is actively involved in developing national policy and guidelines for transplant centres, which includes management of patients both pre-and post-transplant.

However, transplant centres can themselves screen patients for a range of conditions according to their local protocols.

Some national guidance is published in collaboration with both NHSBT and the BTS. However, local transplant policies are written by the local hospital/organisation.

Currently, there are no national guidelines recommending universal or targeted screening of solid organ transplant recipients for Strongyloides infection. This is done on a case by case clinical basis.

### 2. Potential Donor Screening

The Advisory Committee on the Safety of Blood, Tissues and Organs (SaBTO) produces guidance on risks of donor-transmitted diseases. Its remit also includes providing advice on the microbiological safety of gametes and stem cells, in liaison with the relevant regulatory authorities. The Committee will provide independent advice on risk management for Ministers, UK Health Departments, UK Blood and Transplant Services and the wider NHS to consider.

NHSBT also adhere to The Quality and Safety of Organs Intended for Transplantation Regulations (2012), which stipulate that minimum data should be available to support decision making in accepting an organ for transplant. This includes the results of specific microbiological investigations. Review of microbiology results are a mandatory requirement for the acceptance of tissue for transplantation, in accordance with the Human Tissue (Quality and Safety for Human Application) Regulations (2007).

NHSBT are responsible for ensuring donors are characterised thoroughly prior to organ offering and acceptance by any transplant centre. The assessment includes gathering of medical, social, behavioural and travel information and microbiological testing. The donor's family and/or the most relevant life partner should be interviewed, and supporting information obtained from relevant health professionals such as the donor's General Practitioner (GP).

Routine microbiological results will always be available pre-donation: currently, screening for Strongyloides stercoralis does not form part of the routine tests completed in any donor irrespective of country-of-birth or travel history.

# 3. Strongyloidiasis

In the United Kingdom, strongyloidiasis is seen predominantly in migrants and returning travellers from endemic areas in the tropics and subtropics. Public Health England (PHE) guidance exists on migrant health care in relation to geographically restricted infections, but the asymptomatic nature of chronic infection poses difficulties with identifying those individuals that could benefit from testing.

#### **Action taken**

 NHSBT first became aware of a Strongyloides infection at the end of May 2019 having been contacted by the recipient trust. NHSBT wanted to confirm if the infection was a reactivation of the patient's own infection or if it was transmitted from the donor to the recipient as a result of transplantation.

NHSBT reviewed the donor's clinical information which included medical history, social, behavioural and travel history. At the request of NHSBT further testing was completed at the Public Health Laboratory (PHE) of the donor's serum. The recipient's Trust requested PHE test the recipient's pre-transplant serum. The results confirmed that Mr Phung had evidence of Strongyloides infection prior to the transplant, which resulted in uncontrolled spread under immunosuppression in the post-transplant period.

2. Direct liaison between NHSBT and the transplant centre resulted in a national survey of transplant centres to gauge frequency of similar events and practices regarding this helminth infection. All 31 transplant centres were sent a survey, there was a 42% response rate. The results, from the responses received indicated that no other centres had seen a case of Strongyloides infection in their recipient population.

There is recognition that this rare infection can cause significant morbidity and mortality in transplant recipients and as a result of this infection we are proposing the actions below.

# **Proposed Actions**

NHSBT and BTS together will ensure the actions listed in the table below are actioned:

No	Action	Organisation	Date
1	Write to SaBTO to formally advise them of this case and ask for a	NHSBT	By 31 <sup>st</sup> August
	clear position on donor screening		2019
2.	BTS to discuss with their standards		31 <sup>st</sup>
	committee about any future	BTS	October
	guidance on Strongyloides		2019
	infection in transplantation		
3.	Write to Transplant Centre	NHSBT	By 31 <sup>st</sup>
	Directors to inform anonymously of		August
	this case for awareness		2019
4.	Include information on this	NHSBT	By 30 <sup>th</sup>
	infection as part of shared learning		September
	in NHSBTs Medical Bulletin and		2019
	Cautionary Tales		

Should you have any further questions then please do not hesitate to contact NHSBT/BTS and we will endeavour to assist in any way we can.

Your sincerely

Professor

Medical Director – Organ Donation & Transplantation

Professor

President - British Transplantation Society