

THE EYE-COLLECTOR'S STORY



The transportation box for donated eyes (photo: Ann Lingard)

John Richardson is Corneal Transplant Co-ordinator based at Gartnavel Hospital in Glasgow. He has held this unique and challenging post since November 2009 -- unique because this is the first Eye Retrieval Unit in Scotland.

"I am here to promote eye donation, to ensure the process of eye donation in this area is sound" he tells me, "and to increase the number of eye donors by looking for and finding them. So I wear several different hats, educator, strategist, retriever - and beggar!"

Despite the latter 'hat', he offers to buy me a coffee and we join the queue at the café in the bustling semi-chaos of the hospital's reception area. Dressed in a pale-blue pullover, grey trousers and brown leather shoes, wearing gold-rimmed glasses, and slightly balding with fair hair, he looks relaxed but slightly out of place amongst the ebb and flow of uniforms and outdoor coats.

He is a quietly-spoken man in his late 40s, with a soft slightly-indefinable Scottish accent (he was born in Crail but has lived in Edinburgh, Malawi and Glasgow), and his reflectiveness and humour are always there as he talks about his job and background. I think that he probably needs that sense of humour, when we reach the office that he shares with his part-time colleague, the Corneal Transplant Nurse: it is a small windowless box right next to the hospital kitchen, where our senses are blasted by the powerful smells of food and the clashing and rattling of metal trolleys and trays, and shouting and joking ('and a good deal of swearing', John adds ruefully). His small radio plays classical music in the background as an antidote.

Both when I spoke to him on the phone previously, and now, when we meet in person, his enthusiasm and commitment to his work are very clear, as are his reasons for wanting to have this story told. "Anything which helps to dispel myths and to lighten the discussion about donation is valuable in my book, and I'll do what I can to help. The more I become involved in the world of tissue donation, the more fascinated I am. Aside from pesky targets which I know may - if they're not reached - spell the end of this job, I'm enjoying the uniqueness, the challenge and the importance of the work. Of course I joined the Organ Donor Register myself when I took up the job, because it forced me to think about donation and make a decision. Beforehand, like many of the

people I meet on a daily basis, I'd never really been challenged to think about it. A lot of money has been spent on getting people to register for organ donation -- but it's the *discussion* that needs doing."

The discussion about eye donation is a delicate and sensitive subject for many people. Eyes define our appearance, they are the way we see the world; they have been called 'the windows of the soul'. We are also much more helpful and sympathetic towards people who are blind or partially-sighted than towards the deaf or 'hard of hearing'. And many people are very squeamish about eyes, and the thought of touching them or having them removed. In contrast, there are also many people who are excited by the thought that their donated eyes will give someone 'the gift of sight': it is almost like a living memorial to the donor. So, there are very many factors to think about, when people are asked to consider either the donation or the collection of such deeply personal organs such as eyes.

When John started as Corneal Transplant Co-ordinator for the Eye Retrieval Unit, he "missed the 'hands-on' at first - at the Western I had my own clinic list, dealing with patients with chronic glaucoma, cataracts, doing the occasional diagnosis, talking to people." But now he enjoys talking to people to promote the idea of donating eyes – to doctors and nurses on the wards, getting them to approach families and patients, and to check the organ-donor registers; he plans also to talk to schools and groups such as the WI. He has even started a Master's Degree in Health Education at Glasgow Caledonia because he "felt underskilled". "I like to get out and about on the wards, talking to the medics and nurses. At first the ward staff were a bit shocked to have someone apparently trawling around in their unit, but now I chat to the staff in the wards each week. It's easier with the junior doctors, they tend to be pretty receptive to the idea."

Discussion with potential donors and their families usually centres on several areas of worry and concern.

How will donated eyes be used? Well, not for whole-eye transplants: apart from the difficult technical task, it would be impossible to connect up the 'wiring' of the eye - the mass of nerves that exit the back of the eye-ball in the optic nerve - with the right 'electric sockets' in the brain. John explains, "The vast majority of the eyes will have their corneas used in transplantation. A small number will have sclera used in certain glaucoma surgery procedures, and some will, after assessment at the eye bank, be deemed unsuitable for transplantation. If the relevant consent [in Scotland, authorisation] is obtained from the next of kin, the unused tissues can be used in eye research. And now there are new lamellar techniques where for example just a sheet of epithelium is used. As for survival rates, ninety percent of transplanted corneas are working well after a year, seventy-five per cent after five years."

The patient's family may wish to be informed what has happened to the eyes, and within four to six weeks they will be told the gender and age of the recipient, and where he or she lived in the UK.

This question of 'Informed consent' or authorisation is tremendously important - donors and their families must know exactly what they have signed up to, and that their wishes are entirely clear. In Scotland at present, a family can authorise the removal and donation of organs over the phone after a patient has died, and the conversation is recorded. As John says, "The on-call transplantation co-ordinator may be based in Aberdeen, and the process

requires an in-depth examination of the deceased's medical history, and so there are lots of awkward questions to be answered."

"But of course, even if a patient has registered as an organ donor, the family might find this too hard to deal with and withdraw consent. If the family says 'no', of course we have to accept this, we certainly wouldn't go down the legal road. There are all sorts of ideas about how disfigured the person might be after their eyes are removed. Despite the patient's consent, the relative might say 'Oh, I don't want you to touch the face.' In Australia, they show the relatives a photo of a person with the eyes removed, to show that they don't look any different - but I don't think we should go down that road. It's bad enough for them without having to look at a picture of a different dead person."

I ask John to explain to me the process of Eye Retrieval (or 'enucleation' to give its safely dehumanising and proper term). "We have 24 hours following death to collect blood samples and the eyes, and package them for delivery to the two national eye banks in Bristol and Manchester. The blood samples are used for testing for viral and other microbiological infections - prior history will be gleaned from the patient's hospital records and if necessary from the GP."

(There are certain contra-indications which exclude the use of eyes, such as whether or not the patient has known or suspected CJD, or a degenerative neurological disease such as Alzheimer's, or certain malignancies, for example.)

"In Glasgow, the majority of our eyes are retrieved by suitably trained mortuary technician or APTs [Anatomical Pathology Technologists]. Occasionally my colleague and I will be involved and very occasionally the Ophthalmologists will do it. Outside of Glasgow it is generally Ophthalmologists who do all the retrieving, although this year we have put a number of nurses and APTs from outlying areas through the retrieval course - it's run by the Manchester eye bank. Ophthalmology nurses don't do the course if they don't want.

"Retrieving generally takes place in the mortuary - but a multi-organ and tissue donor may have his or her eyes retrieved after the organs have been retrieved in the operating theatre. It generally takes about half-an-hour to retrieve both eyes - though the more practised APT could probably do it in half that time."

To the left of where I am sitting in John's office is a shelf packed with white corrugated plastic boxes labelled 'HUMAN TISSUE FOR TRANSPORT', and he now takes one down to show me the contents. It is lined with expanded polystyrene and contains sealed plastic envelopes with disposable instruments, bottles and containers, one of which is an 'ocular tissue transplant box'. There are also several pages of very clear instructions for the Enucleation Protocol, including the method of dissection, and details, of how to place the eye to the special plastic eye stand. A plastic bag of melting ice-water is placed inside the large box, plus the Donor Information form, and then the eyes are transported to the Manchester Eye Bank where they will be stored for one month before use.

I have met John at Gartnavel on a day in mid-December 2010, when much of the UK has ground to a halt because of snow and prolonged sub-zero temperatures. Sadly, two donated eyes have just been rendered

unusable because impassable roads meant they were unable to get to Manchester. This means that the opportunity for two more transplant operations early next year has been lost.

The highly sensitive matter of whether a patient's face will be disfigured after eye retrieval is the other subject which John has had to get used to explaining. He can describe it more baldly to me, here in his office: "The sockets are packed with cotton wool, a plastic eye cap is placed over this and the lids are closed. The plastic cap has small raised nicks over its surface - a bit like mini carpet-grippers - so that the lid is held closed. It would normally be impossible to tell, by looking at the face following retrieval, that the eyes had been taken. Retrieval wouldn't adversely affect plans for an open casket funeral, for example."

Although the details of eye retrieval are not for the faint-hearted, I am very impressed at how clearly everything - from the sensitivities to the technicalities - seems to have been thought through. Although I myself have joined the Organ Donor Register, for a long time I felt ambivalent about donating my eyes: now that I understand the process I feel immensely cheered.

I am also very conscious of something John said to me very early on. "When people who work in Organ Donation talk to journalists they should say, 'You have the lives of people in your hands. Don't write something crass because you'll kill people'." I am not a journalist, and the loss of an eye is not life-threatening, but ...

So what about those "pesky target", the bane of the NHS? "In my first year, we had to retrieve 150 eyes by April 2010 - we managed 142. We have to retrieve 250 in the second year - in other words an extra couple a week - and 350 in the third year." Every morning John phones the mortuary to see "what's fresh".

His job description must be a bit of a conversation stopper? He laughs: "I take Ben, our labrador, for a walk in the park and I might meet someone I haven't seen for ages and they ask, 'What are you doing these days?' I usually just say I work at Gartnavel!"

John's route to Gartnavel has been interesting. He beats the city traffic-jams by riding to work on his motor-bike; if anything goes wrong with the bike, he says, "I tinker with it myself - my father and grandfather were both fine mechanics". His father was in fact an engineer. "I was originally from Crail, a wee fishing village in the East Neuk of Fife. I was born there in 1964 - well, in the maternity hospital which sits in the middle of what is now the Duke's Course at St Andrew's. A fine golf course!" (I learn later that John and his brother and sister are all keen golfers.) "My parents - my father was an engineer, my mother a teacher - went out to work in Malawi in 1976, and like my sister I went off to boarding school in Edinburgh, flying out to Malawi for the holidays. Then I did a variety of things, while searching for a career which grabbed my attention." These included farm labouring, bar work and two years teaching English in Madrid, before working as a carer to support adults with learning disabilities.

So he was in his late twenties when he made the decision to go into nursing, and successfully applied for a place on the Bachelor of Nursing course at the University of Glasgow. During his final year he worked on the plastic surgery wards at Canniesburn Hospital, and would have liked to stay

on there after graduating -- but there were no staff vacancies available. There was, however, a nursing post in the Ophthalmology Department at the Western Infirmary.

"Serendipity can play such a big part in your life! I scratched my head to try to remember anything at all about ophthalmology, but decided to apply anyway, and I got the job. I was very impressed with how calm the unit was - it was a small ward, very peaceful and quiet."

It was on that eye ward that he met the nurse who became his wife, and he stayed working as a nurse in Ophthalmology for 13 years before being appointed to his new position.

"If I'm given a task to do, I'll make sure that I fully understand what I'm being asked to do, and generally make a very good job of it. My wife sometimes remarks that I have 'a touch of OCD' when doing things around the house because I can be ultra-systematic!" A useful attribute when it comes to co-ordinating the donation and collection of eyes, from the 15 general hospitals in the West of Scotland area.

Should the plans for re-building the Southern General go ahead, that hospital will house the police and city mortuaries, and will become the focus of all the mortuary services for the area. That will certainly simplify the retrieval of eyes and other tissues - and although that lies a long way ahead, John Richardson should be pleased that he is pioneering the donation and collection of corneas from the West of Scotland.

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