



NEWSLETTER – Spring 2018

ADDENBROOKE'S TRANSPLANT ANNIVERSARIES



Fifty years ago, in 1968, the first liver transplant outside the USA was performed at Addenbrooke's Hospital by Sir Roy Calne. Much of his subsequent work focused on the improvement of immunosuppression techniques aimed at prolonging the life of liver transplant recipients.

Ten years later, in 1978, the first combined pancreas and kidney transplant was carried out in Cambridge. The same year, the first clinical use of cyclosporine as an immuno-suppressive drug in liver, kidney and pancreas transplant recipients took place in Addenbrooke's hospital. What a lot we owe to this wonderful hospital.

SURGEONS: AT THE EDGE OF LIFE

A number of readers may have seen the BBC2 programme towards the end of January which featured work being carried out using a liver perfusion machine. There is a shortage of organ donors but sadly many donated organs are rejected, as only those in excellent condition are considered suitable for a transplant procedure. Research into preserving donated organs and improving their function once transplanted is one exciting area of research that is being undertaken by the transplant team at Addenbrooke's.

Traditionally, a donated organ is preserved until it can be transplanted by cooling the organ with a preservation fluid, placing it in a sterile bag containing the preservation fluid and then storing it in a box containing ice. Alternative methods using organ preservation machines are being trialled to limit any potential damage that can happen to an organ. Whilst cold storage has enabled many people to receive liver transplants, it does have some limitations:

- It is unable to reverse any injury that may occur during donor death
- It may cause further injury due to the cooling process
- There is a limit to how long a liver can be stored on ice because there is no oxygen or nutrient supply to the cells

- It does not enable assessment of the liver function prior to transplantation.

For the last 10-15 years there has been increasing interest and research looking at preserving the liver at normal body temperature prior to transplantation whilst establishing a circulation of oxygenated blood to the liver – a technique called normothermic preservation. Studies have demonstrated that the quality of preservation can be improved by normothermic perfusion, supplying both oxygen and nutrients to the liver. The liver can then be proved to be functioning during the preservation period, producing bile and using glucose.

*With acknowledgments to Linda Selves MSc,
Liver Transplant Research Nurse*

THE TRANSPLANT TEAM THAT GIVES PATIENTS A SECOND CHANCE AT LIFE



Stephen Bond.

Photo: Keith Heppell

Every day, Stephen Bond and his colleagues see how organ donation gives patients a second chance at life. Stephen is the lead nurse in charge of the transplant co-ordination team at Cambridge University Hospitals (CUH). The 15-strong transplant co-ordination team is largely unknown, but it plays a life-saving and highly-pressurised behind-the-scenes role. “We’re that first port of call for the patients – whether it is

being assessed for transplant, being managed on the waiting list, or if they’ve had their transplant. We’re the glue that holds it all together” said Stephen.

Often described as being the “air traffic controllers” of the transplant world, if there is a problem, the transplant team fix it. The team is made-up of specialist nurses who assist more than 300 patients a year, who receive replacement livers, pancreas, small bowels, or kidneys. They are on call 24 hours a day, seven days a week, 365 days a year, and support specialist surgeons to ensure every step of the transplant process goes smoothly from the moment a donor organ becomes available, to the transplant itself, and follow-up care.

As CUH is a national transplant centre, patients can live anywhere, from Jersey to Scotland, and rapid transport must be arranged. Some patients come under their own

steam, some by ambulance and others by air ambulance. On one occasion, a patient was airlifted from a cruise ship!

“We’re the port of call for Addenbrooke’s for organ offers, nationally, so there may be an organ somewhere in the country and we’re the people that get that call,” Stephen explained. “It’s a lot of juggling. We might have three or four organs coming in at the same time from different hospitals, so you have to be methodical.” He continued: “We work out all the information about the donor and we then discuss it with the surgeons and the medics as well and help facilitate who that organ will go to. Once we’ve agreed that the donor organs are acceptable and we’ve agreed on the recipient, we then organise getting everyone in the right place at the right time to perform the transplant.” The organ must be recovered, so the team arranges the speedy delivery – or retrieval – by the hospital’s dedicated retrieval team. It includes two surgeons and a scrub nurse, who may have to go anywhere in the UK at a moment’s notice. At the same time a theatre and surgical teams must be booked, and a bed found in intensive care and/or the specialist ward on the fifth floor of Addenbrooke’s Hospital. The co-ordinators, who may have organised the patient’s initial assessment months or years ago, will look after them throughout their stay in hospital and welcome them back if they need follow-up treatment. Sometimes this relationship can last for years. Stephen explained: “For me, I see a lot of patients post-transplant when they are back out in the community and you’ve seen them on a ward three or four years ago, and you don’t see them after that, and then they come up to you. Although we don’t necessarily remember them, we stick in their mind.”

The nurse co-ordinators each specialise in one area – liver, pancreas, small bowel, or kidneys, but are expected to deal with all disciplines when on call. It is a very specialist area, and a vocation for most. A milestone moment is when the team rings a patient, which can be at any time of the day or night, to say an organ has become available. The potentially life-changing news can, quite literally, leave some patients speechless. Part of the job involves managing expectations, since there is always a possibility an organ may not be suitable or viable after all. Stephen explained that on one occasion, a woman who had been waiting for a kidney transplant for more than seven years wasn’t answering the phone. The team knew she was hard of hearing and she was only woken up by a policeman up a ladder knocking on her bedroom window – organised by the team!

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CELEBRATING 10,000 DAYS!

Towards the end of last year, one of our founder members, Ruth Perfitt, attended a meeting of nurses and one of the speakers said that patients aged over 65 who were admitted under “care of the elderly” may be in their last 2,000 days, so don’t waste

any of them while you plan what to investigate and then plan what to do with the outcome! Ruth realised that for someone with an 80th birthday on the horizon, that would include her, so she started to wonder how many “extra” days she had already had as a result of her transplant. She Googled “How many days since 20th May 1990” and as at that date it came up with 9,984! In her own words: “Wow! I had never quite realised, so it seemed like a very good reason to celebrate, so we did!” Well, we don’t need Google to tell us that those days are rapidly approaching the 30-year mark and whilst congratulating Ruth on her 80th birthday, we wish her many more to come. She says that she doesn’t feel 80 and she really cannot remember how it felt to be so ill that she was reduced to a wheelchair. She says she feels truly blessed.



THANK YOU!

Each year, and especially around the time of our annual Celebration Day, a large number of people generously make donations to our funds. We feel it may be counter to the donor’s intentions to spend those precious donations writing to thank each and every one of you, but please be assured that they are all enormously appreciated and we do extend our warmest thanks to you all.

THE BRITISH TRANSPLANT GAMES 2018

Transplant Sport (TSUK) host the British Transplant Games every year and participants of all ages and ability enjoy taking part in over 20 different events. All have received a life-saving transplant and celebrate their gift of life together. The Addenbrooke’s Team has been competing for well over 20 years now and is one of the most successful teams – we have team members whose ages range from 18 to 92! This year the British Games will take place at Birmingham University from August 2nd to 5th. Our very sporty members also compete at the World Transplant Games, and last year went to Malaga where Team UK was the most successful team! Major contributors included Michelle Mitchell, Liam Barnett and Tony Scott - all Liver recipients from Addenbrooke’s! The next WTG will be hosted by Newcastle in 2019. We want to encourage all transplant recipients to get active and be healthy whilst promoting organ donation, so TSUK organise other activities throughout the year - Football, Volleyball, Cricket and Golf are just some of them. Taking part, regardless of ability, is what it is all about. For those less athletic, there are darts, ten pin bowling, lawn bowls etc. so all are welcome. More information can be found on the website at www.transplantsport.org.uk/.

DATE FOR YOUR DIARY: Celebration Day this year will be held on Sunday, 14th October, and it will again take place at the Hallmark Hotel in Bar Hill.