**Kidney Transplant Service in NI 2021-2022**

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**June 2002**

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On behalf of the Medical Advisors to the Northern Ireland Kidney Research Fund, I am delighted to provide an update on the Kidney Transplant Service for the Annual General meeting. Organ donation and transplantation has been a consistent focus for the Fund throughout its 50 years. With the support of the NIKRF in ‘lighting the way’, the Kidney Transplant Unit in Belfast is ‘leading the way’ both nationally and internationally.

**Impact of COVID-19**

Throughout 2021, the transplant programme continued under severe restrictions, first introduced at the beginning of the COVID-19 pandemic. From mid-March 2020 until mid-November 2021 we were closed to deceased donor transplantation for 253/603 (42%) days. The only exceptions during these periods of closure were for high priority patients, typically those for whom it is very difficult to obtain a match.

The living donor programme was impacted even more severely affected by the COVID-19 related pressures on the health care system, with no opportunity to transplant for 480/603 (80%) days. Fortunately we were able to continue with the children who were waiting, and indeed in June 2020 were the very first Unit in the UK to carry out a paediatric living donor transplant. For adult patients however the opportunities were greatly restricted and so dialysis instead of transplantation was a necessity for many.

When we were ‘open’ we transplanted as much as possible! This in itself brings its own challenges, having a ‘seasonal’ programme is difficult for all staff in the ward, the laboratory, and outpatients. We remain immensely grateful for the nursing, administrative, laboratory, and domestic staff who quietly worked to an exceptional standard despite these challenges.

Encouragingly since November 2021 the programme has not been closed, and although not up to pre-COVID operating levels, for the living donor transplants in particular we are now able to once again schedule these in a timely fashion. The situation for access to theatre for deceased donor transplantation remains unfavourable. Predominantly such transplants take place in the evening or overnight. This has implications for what kidneys we can accept, and what patients we can transplant - not all are suitable for emergency surgery overnight because of other health issues. It also has major repercussions for the small but dedicated surgical team.

Clearly COVID-19 has posed great challenges for those leading the health service, with difficult decisions to be made both then, and now in the aftermath. We acknowledge this, but continue to seek equity of access to healthcare for those with kidney failure, where the implications of potential missed opportunities for transplantation are huge. We are grateful for the solidarity and support of the Fund in pursuing this with us.

**Transplant numbers in 2021**

In 2021 there were 107 patients in NI who received the ‘gift of life’ with a kidney transplant. Given the restrictions, this was a remarkable achievement, and potentially ranks alongside the 101 in 101 days in 2020! By the end of June 2022, there were 53 patients transplanted, so a comparable rate of transplantation, at this stage, to last year. The average for the 5 years prior to the pandemic (2015-2019) was 120 transplants per annum.

**Deceased donors**

Traditionally the UK offering system matches each kidney with a particular ‘named’ individual. The decision as to which patient receives an organ is the result of a complex algorithm, which considers such factors as donor and recipient age, geographical location, the closeness of the match, and the length of time waiting for transplantation.

To a certain degree the Belfast transplant programme has become a victim of its own success – because we work hard to get people transplanted as quickly as possible, we have a relatively small number waiting for transplant compared to almost every other transplant unit. As a result, we no longer get many ‘named’ offers.

However, sometimes a transplant unit decline a kidney that has been offered for a named patient. There are a number of reasons why this happens, for example because of damage to the kidney, or concerns about some aspect of the donor’s health, or perhaps because the potential recipient was unwell at the time and could not be transplanted. Such kidneys then are offered out nationally with the hope that they can still be used for someone. This is known as the ‘fast track’ scheme. If a transplant team feels they can utilise such a kidney, they can ‘bid’ with other units for it. Not all centres take part in this scheme, but Belfast have been involved since July 2020.

Such kidneys are providing an increasing opportunity for NI patients, accounting for over half of all the deceased donor transplants in 2021. There are additional challenges, and often risk, with such kidneys and we are indebted to the skill and courage of the transplant team in accepting and transplanting.

**Living donors**

From the nadir of 2020, the numbers of living donor transplants picked up again in 2021 with 54 people receiving a healthy living donor kidney. Belfast continues to make great use of the UK Kidney Sharing Scheme, where living donor kidneys across all of the UK and Ireland are ‘swapped’ typically because the donor is not a match for their loved one who requires a transplant. Almost a third of the living donor transplant last year involved this scheme. It is yet another means for getting the best outcome for as many NI patients as possible.

As ever, we remain humbled by the people who do not have personal knowledge of anyone needing a kidney transplant, but who want to make a difference and donate a kidney to a stranger. This group, termed non-directed or altruistic donors, are an amazing group of individuals. Last year there were 11 such donors in NI, matching the previous record year of 2014.

**Recipients**

Over the past decade the transplant team have been ‘pushing the boundaries’ in accepting patients who would previously have been precluded from transplantation, because of concerns over their age or health problems. This includes patients for example who are older, have kidney failure due to diabetes, or are more obese.

From the inception of the transplant programme in 1968 until 2010, just 17 older patients (> 70 years old) were transplanted. Since then however, there have been 120 who have been at least 70 years old at the time of transplant. The vast majority of these have benefitted hugely, with 98 still alive and well with their kidney still working. It is anticipated that for almost all, the kidney will work for the rest of their lives, with no requirement for dialysis. Of course, not everyone at this age is suitable for the physiological stress of a transplant operation, and a key skill is in selecting appropriately those for whom a transplant will enhance life, and not be an added burden (due for example to medications and hospital visits).

**Team**

Transplantation is truly a ‘team sport’! The excellent outcomes in Belfast are only possible by the combined effort of many individuals, each striving to do their very best for the patients. There are too many to mention in this report, but each is greatly appreciated.

In terms of the ‘headlines’ Damian McGrogan was appointed in 2021 as a transplant surgeon, and took up his position in February 2022. This is a replacement position, Mohie Omar having moved into a non-clinical role within the Belfast Trust. We wish him well.

An incredible member of the team, Jennifer McCaughan, left this world to go to a better. This was much earlier than any of us would have chosen. We are the poorer for her absence, but grateful that for her time here she was ours.

There is no doubt that all who volunteer and support the NIKRF are important members of the transplant team. The support given in many diverse ways enable us to do what we do. With your help we will continue to ensure that, if you happen to have kidney failure, NI is a very good place to live.

Dr AE Courtney

Transplant Nephrologist