Recent change in law and corneal transplantation in the UK

Maria Dimitry1 · Hanbin Lee2

To the Editor:

Max and Kiera’s Law, also known as, the Organ Donation Bill 2019 came into effect on the 20th of May 2020. All adults are now considered potential organ donors when they die unless they have ‘opted-out’ or are in one of the excluded groups. A combination of short and long term challenges affect the supply of corneal tissue.

There is a debate as to whether opt-out or opt-in schemes have an effect on the number of organ donations. According to the NHS Transplant activity report 2018–2019, 80% of people in England support organ donation but only 38% have opted in [1]. Belgium had an increase in donation rates after the opt-out system was introduced however Sweden, Bulgaria, and Luxembourg have very low rates of donation despite it. In 2016, a study looking at deceased donation rates showed 21.2 in the UK, 30.7 in Belgium but 43.6 per million population in Spain [2]. Spain’s success is attributed to investment in education and infrastructure rather than its scheme, which is not completely opt-out.

A longstanding challenge faced for ocular donation is that it is not as popular as other organ donation. According to the Transplant activity report 2018–2019, 84% of registrants are prepared to donate all their organs. Of the restricted donor’s on the register (registrants not prepared to donate all organs), 68% are not willing to donate their corneas [1]. This could be due to a concern that loved ones might see eyelid bruising or a hollow area around the eye socket. There is also a donation fatigue because eyes are at the bottom of a list of organs that a patient can donate. If patient’s wishes are not specified, the opt-in register leaves families with a difficult decision to make. Less than half of families will agree for their loved one’s organs to be donated if they are unaware of their wishes [1]. This challenge may be addressed following the introduction of the opt-out scheme.

More recent challenges include Brexit and COVID-19 pandemic. Currently, 4000 corneal grafts are carried out per year in the UK according to NHS Blood and Transplant (NHSBT) and the eye banks are 21% below the level needed to supply hospitals [3]. Tissue is also obtained through European and United States eye banks due to their similar quality standards. There is some concern that Brexit is likely to exacerbate the donor shortage due to reduced importation from Europe [4]. SARS-Cov-2 infection rates may affect donation rates temporarily. NHSBT released a position statement in March 2020 to explain that there have been no documented cases of transfer of similar viruses to SARS-Cov-2 via allografts in the past. Also, the current tissue safety measures are adequate to mitigate the risk of transmission [5]. It is expected that there will be a reduced amount of elective surgery, as well as, elderly or immunosuppressed patients choosing to delay corneal transplantation to a more suitable time. In conclusion, despite current variables affecting tissue supply and demand, hopefully the opt-out scheme will have a long lasting positive impact.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Publisher’s note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

References

1. Transplant activity report 2018–2019. Section 12. NHS donor organ register.
2. Arshad A, Anderson B, Sharif A. Comparison of organ donation and transplantation rates between opt-out and opt-in systems. Clin Investig. 2019;95:1453–60.
3. Tissue and Eye Services Ocular Newsletter Issue 1. NHS blood and transplant.
4. Romano V, Dinsdale M, Kaye S. Compensating for a shortage of corneal donors after Brexit. Lancet. 2019;394:732.
5. Lomas R, Rooney P, Armitage J. NHS TES Position Statement. The risk of transmission of SARS-Cov-2 virus via tissue allografts. 2020.