

Ten year review of cornea donor rates in the UK

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On behalf of the UK Transplant Ocular Tissue Advisory Group

Introduction

In addition to information on solid organ donation and transplantation, the National Transplant Database also contains a complete record of cornea donations and transplants in the UK. This study reviewed cornea donor rates in the UK over the 10 years, 1994 to 2003.

Methods

- Data relating to 23,249 cornea donors in the UK from 1 January 1994 to 31 December 2003 were analysed
- Donor rates per million population (pmp) in each country within the UK were investigated
- Donor age and cause of death were considered separately for "cornea only" and "solid organ and cornea" donors

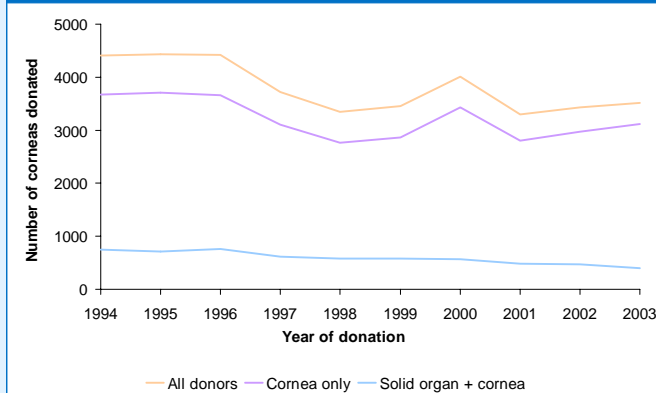
Results

- Between 1994 and 2001, there was a 25% decline in the number of corneas donated from 4413 to 3292
- Recent figures suggest the downward trend in corneal donation is reversing as donations since 2001 have increased by 7%
- 16% of cornea donors also donated solid organs
- The number of corneas donated from "solid organ and cornea" donors has declined by 46% from 747 in 1994 to 403 in 2003, nearly 3 times the decline in solid organ donation for the same period
- Donor rates pmp per year over the three year period 2001-2003 varied between the countries of the UK, Wales had the highest at 49.7 pmp
- Nearly a third of "cornea only" donors died from a cardiovascular event in 2003
- 78% of "solid organ and cornea" donors in 2003, died from an intracerebral event
- The mean age of "cornea only" donors was 65 years (s.d. 16) compared with 46 years (s.d. 15) for "solid organ and cornea" donors ($p < 0.0001$)

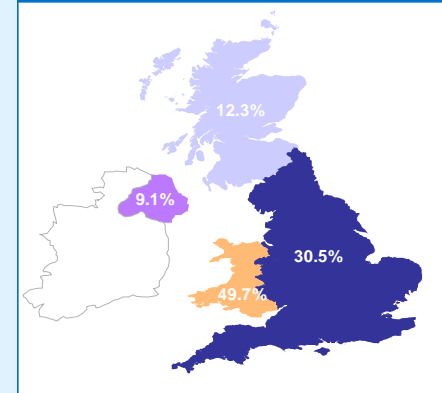
Conclusion

- A downward trend in the number of corneas donated has slowed as figures in recent years have increased by 7%.
- The number of corneas donated by "solid organ and cornea" donors has continued to decline over the ten year period.
- An investigation of cornea donor rates pmp shows variation across countries within the UK.
- The majority of cornea donors died from natural causes.
- As expected, "cornea only" donors are generally older than "solid organ and cornea" donors.

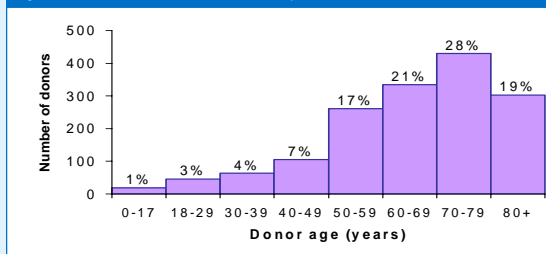
Number of corneas donated, by year



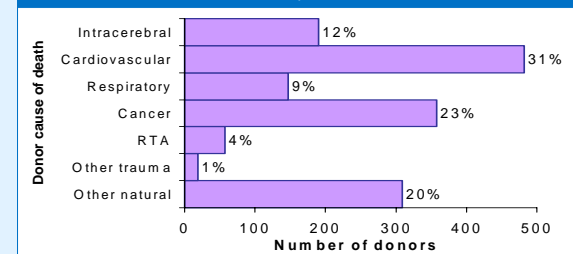
Cornea donor rates per million population per year over the three year period 2001 to 2003



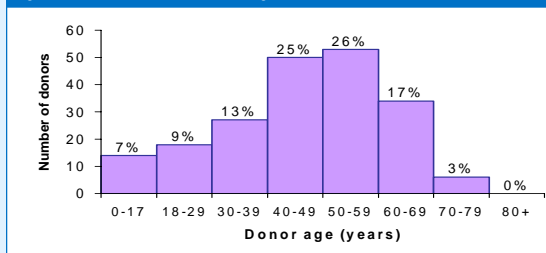
Age distribution of "cornea only" donors in 2003



Cause of death of "cornea only" donors in 2003



Age distribution of "solid organ and cornea" donors in 2003



Cause of death of "solid organ and cornea" donors in 2003

