

Kidney transplantation

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ADPKD Information and Support Day

Summary

- Why transplantation?
- Assessment for placement on the waiting list
- Surgical assessment
- Placement on the waiting list
- Waiting
- Getting the call
- Transplant operation
- Post-operative recovery
- Receiving or giving a live donor kidney

Treatment options for kidney failure

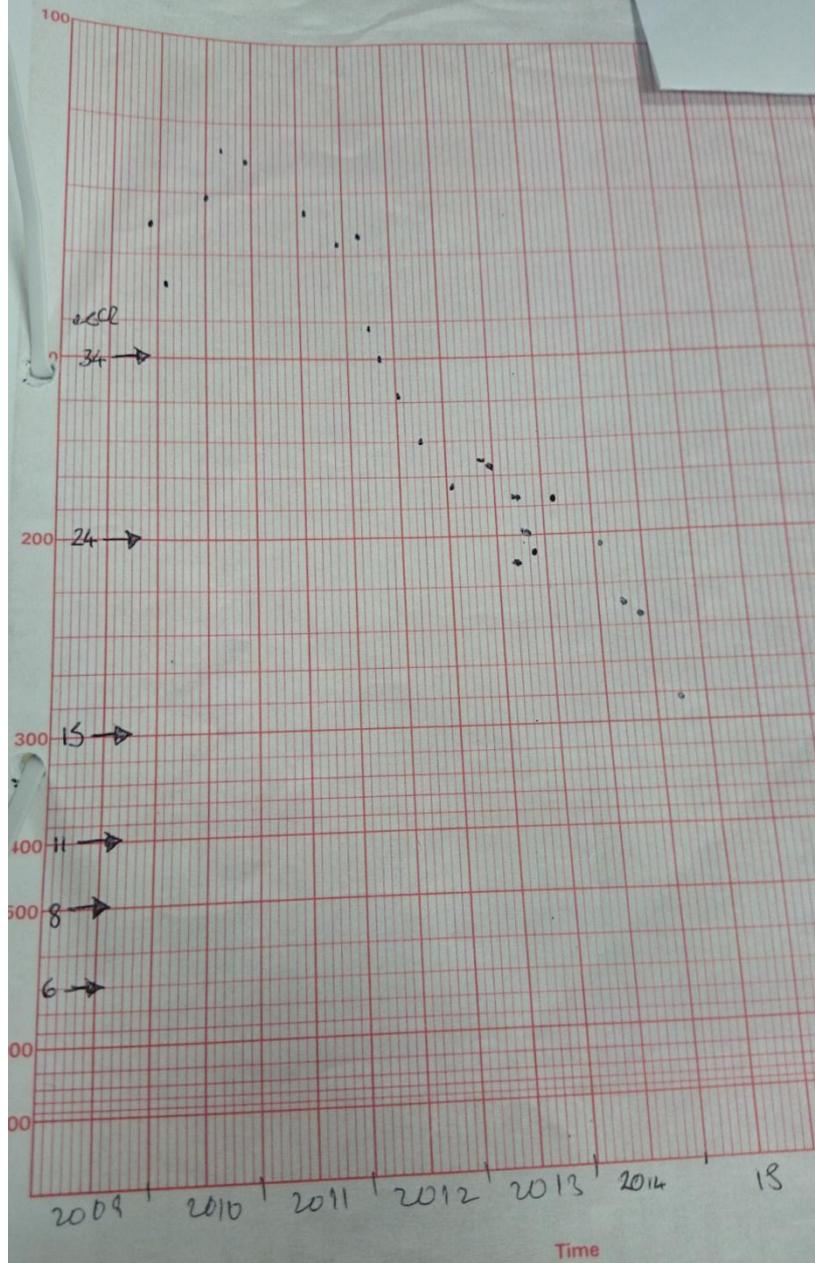
- Renal Replacement Therapy (RRT)
 - Haemodialysis
 - Peritoneal dialysis
 - Kidney transplantation
- Non-RRT
 - Best supportive care

Why transplantation?

- Improved quality of life
- Improved life expectancy
- Return of fertility
- Easily compatible with family life and work
- Freedom from dietary and fluid restrictions

How do we know when it's time to talk?

- No magic number
- Aim to start education and assessment 1 year before renal replacement therapy (RRT) is needed
- Aim to be prepared for dialysis in advance of needing it (know which form of dialysis you are going to have and have 'access' for it)
- Aim to place on waiting list or undertake live donor transplant 6 months before RRT needed



Time

Informed and supported decisions

- Meeting with pre-dialysis specialist nurse
 - Information exchange
 - Dialysis information
 - Transplant Co-ordinator's contact details
- Next contact
 - Support to make decision about dialysis preference
 - Direct contact from Transplant Co-ordinator
 - Hand-held care plan given
 - Consideration of possible live donors

Assessment for placement on the waiting list

- Complete Cardiac Risk Score
- Blood tests
 - Blood group and tissue type
 - Virus screening
- Other investigations
 - CXR
 - ECG
 - Echo, blood vessel scans, stress tests
 - U/S and bladder studies – especially in those prone to urine infections and problems with cysts
 - Referral to other specialists (Urology, Cardiology)

Blood group and tissue typing

- Blood group must be compatible
- Tissue typing
 - Type is inherited from both parents
 - Highly variable within the population
 - Allows the immune system to function effectively
 - Matching involves assessment of 3 key proteins named A, B and DR; you have 2 copies of each

Blood group and tissue typing

Tissue type	A	B	DR
Donor	A1 A2	B8 B44	DR1 DR4
Recipient	A1 A24	B8 B60	DR1 DR4
Match	1	1	0

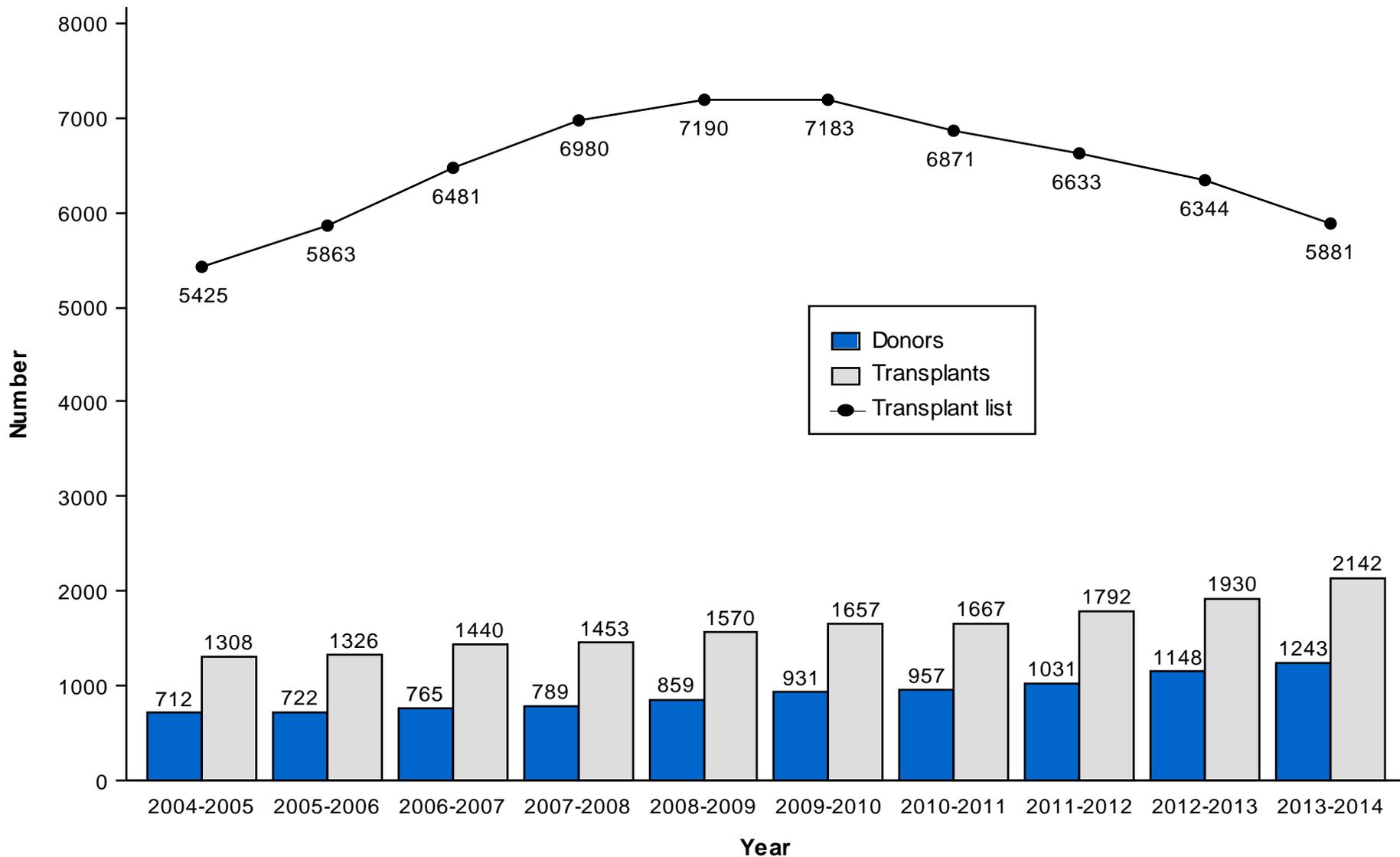
Surgical assessment

- Appropriate forms completed by Renal Consultant
- Attend surgical transplant assessment clinic
- Meet surgeon, discuss operation and sign consent form
- Surgical considerations related to ADPKD
- (Extra tests as recommended by surgeon)
- Receive information booklet from Transplant Coordinator
- Confirm contact details
- Attend anaesthetic pre-assessment clinic (and maybe undertake CPET bike test)

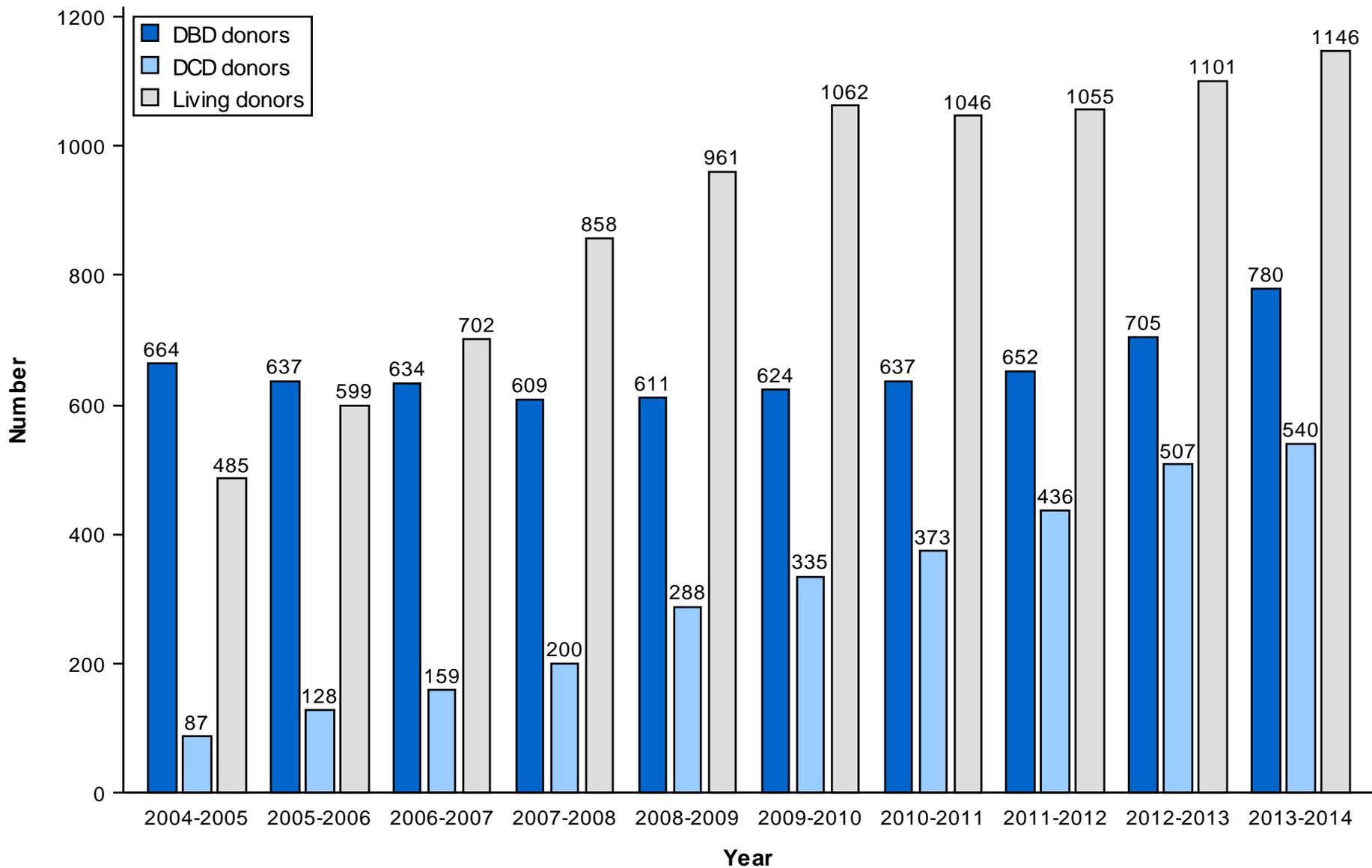
Placement on the waiting list

- Transplant Co-ordinators office liaises with UK Transplant to place on waiting list
- The waiting list is not a queue
- Mean wait is 2 years
- Keep team informed of holidays
- Regular checks of antibody status to facilitate virtual cross-matching

**Deceased donor kidney programme in the UK, 1 April 2004 - 31 March 2014,
Number of donors, transplants and patients on the active transplant list at 31 March**



Number of deceased and living donors in the UK, 1 April 2004 - 31 March 2014



Kidney allocation

- Governed by strict rules
- Points allocated on the basis of
 - Paediatric priority
 - Highly sensitised patients
 - Waiting time
 - Blood group
 - HLA match
 - Donor-recipient age difference
 - Location of patient relative to donor

Waiting – keeping yourself healthy

- Give up smoking
- Limit your alcohol intake
- Take regular exercise
- Stay at a sensible weight
- Take your medication as prescribed
- Visit your dentist regularly
- Attending screening appointments (smear test, mammography, aorta, bowel)
- Avoid sunburn
- Report any new health concerns promptly

Waiting – medical care

- Ongoing clinic attendance
- Prompt assessment of any new problems
- Suspension from the waiting list for serious problems
- Regular checks of antibody status
- Starting dialysis when symptoms and blood tests suggest it is time

Getting the call

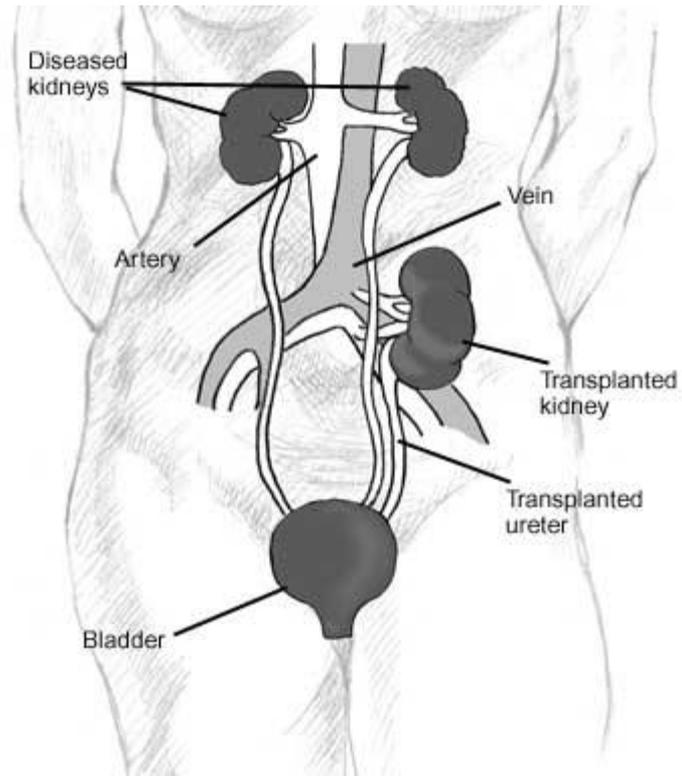
- A kidney is offered by NHS BT
- The surgeon decides whether it is suitable for our proposed patient(s)
- The nephrologist(s) decide whether the patient(s) is/are suitable to be considered for that specific kidney at that time
- The patient is called and asked
 - Are you well?
 - When did you last dialyse?
 - How soon can you get to the Institute of Transplantation?
 - Do you need transport providing?

On ward 38

- Review by the doctor
- Blood tests
- ECG
- CXR
- Review by the surgeon
- Review by the anaesthetist
- Dialysis if necessary
- Virtual or wet cross-match

On ward 38 - challenges

- Not every patient called will receive a kidney
- The patient and their loved ones may have forgotten a lot of what they were told when the patient was listed
- The most suitable patient for that kidney on that day is selected
- Disappointment if not you/your loved one
 - Explanation will be given
 - Opportunity to discuss further with Transplant Co-ordinator offered



Transplant operation

- Usually placed near the groin (the iliac fossa)
- Blood vessels attached to large vein and artery
- Ureter attached to bladder with stent inside
- Catheter placed in bladder
- Central line placed in neck
- Drips in hands
- Patient-controlled analgesia (PCA)
- Most patients go back to ward 38 after their operation

Post-operative recovery

- Focus on comfort so that moving around, deep breathing and coughing are possible
- Gradual return to normal mobility, eating, drinking and moving bowels
- Ultrasound done in first 48 hours
- Focus on fluids in and out, and on urine production and blood test results
- Dialysis may be necessary after the operation
- Training to be familiar with medication
- Stay of 1-2 weeks
- Common complications – bleeding, infection, rejection

Post-operative recovery

- Going home!
- Important to take medication, discuss side effects
- Review 2 or 3 times a week, reducing to weekly and then less frequently over time
- Relaxation of dietary restrictions
- Gradual reduction in number of tablets (though there will always be some tablets!)
- Gradual return to usual activities
- Using contraception
- Competing at the British Transplant Games 30 July – 2 August 2015!

Potential live donors

- Maybe, but not necessarily related
- Healthy
- Wish to give a kidney of their own free will
- Supported by their loved ones in their desire to donate
- Available for medical review, tests to confirm suitability, and the operation

Live donor work up

- Meet Live Donor Transplant Co-ordinator
- Initial discussion and tests
 - CXR
 - ECG
 - Ultrasound
 - Blood tests for viruses and kidney function
 - Urine tests for blood and protein
- Referred to Kidney Consultant for medical review and examination
- Further tests
 - Kidney function scan
 - CT of kidneys and their blood vessels
- If all results acceptable then referred to Urology Consultant to discuss key-hole surgery to remove kidney
- Live Donor Transplant Co-ordinator gives date for operation to pair
- Review by Independent Assessor from the HTA to confirm that requirements of the Human Tissue Act 2004 have been met