

신장이식 : 변화와 발전

Recent Advancement in Renal Transplantation

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1996 1

가 (1).

697 - 24

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(2, 3),

(4), (5)

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가 UNOS(United Network for Organ Sharing) (6)

Abstract

This review will focus on the current issues in the government - driven regulation of transplantation practice in Korea, Korean renal transplant statistics, unrelated renal transplantation, renal transplantation in cross - match positive patients, preemptive renal transplantation, non - invasive renal imaging, novel minimally - invasive living donor nephrectomy, and tailored immunosuppression.

Keywords : **Renal transplantation**

2000 가

가 가

가 .

1993 3

가 (,)
 가
 가 가
 가 가
 가 KONOS

1999 2 8
 2000 2 9

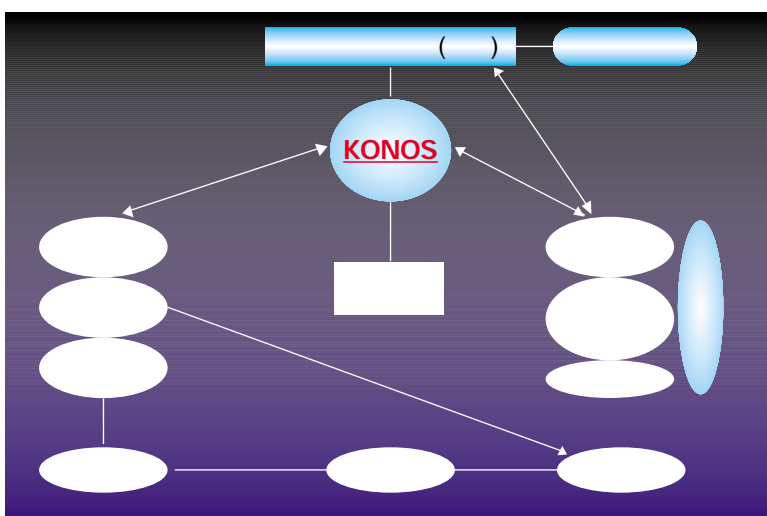
가 KONOS
 'Korean Network
 for Organ Sharing'
 'KONOS' 10
 (5). KONOS

2
 3 (1 : - -
 , 2 : - -
 가 가 1 2 - - , 3 : - -
 가 가) 가
 가 가
 가

KONOS

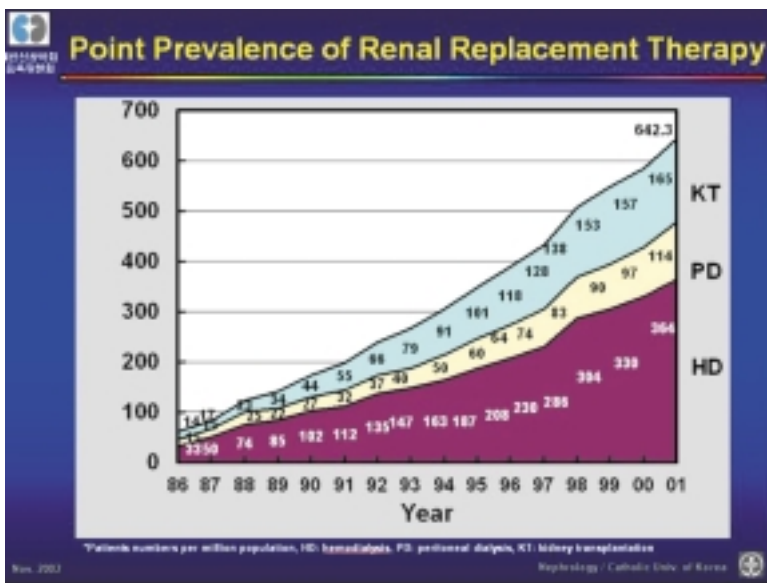
가
가
가
가
가

(1).



1.

가 . 2001 5,500
가 15.4%
. 1986 2001
31,014 25.7%
7,957
100
2 (4).



2.

(4)

2000

가

. KONOS

2002 (5) 2002
70

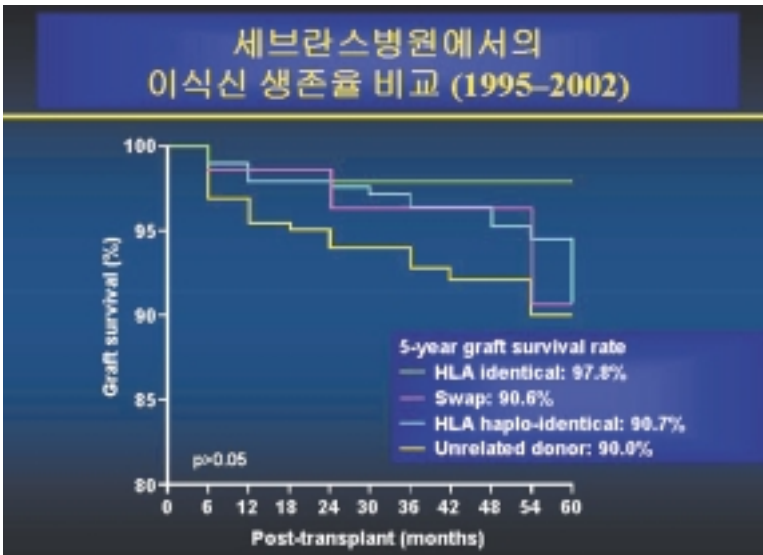
669

1. :KONOS (5)

2000. 2. 9~12.31	1,622	557	125	682
2001. 1. 1~12.31	1,781	690	101	791
2002. 1. 1~12.31	1,578	669	70	739

2. :KONOS (5)

1 (%)	2 (%)	3 (%)
95.89	91.28	90.05
98.70	97.86	97.37



3. : (7)

(2, 3)

1996

1

2

94.9%

93.6%

96.0%, 95.2%,

92.3%, 90.8%,

96.4%, 95.8%

1996

6, 1997 10 가

. KONOS

, 3

90% (2)

(5).

가

HLA - DR 1

HLA - A, B 2

2002

(1).

90%

HLA

5

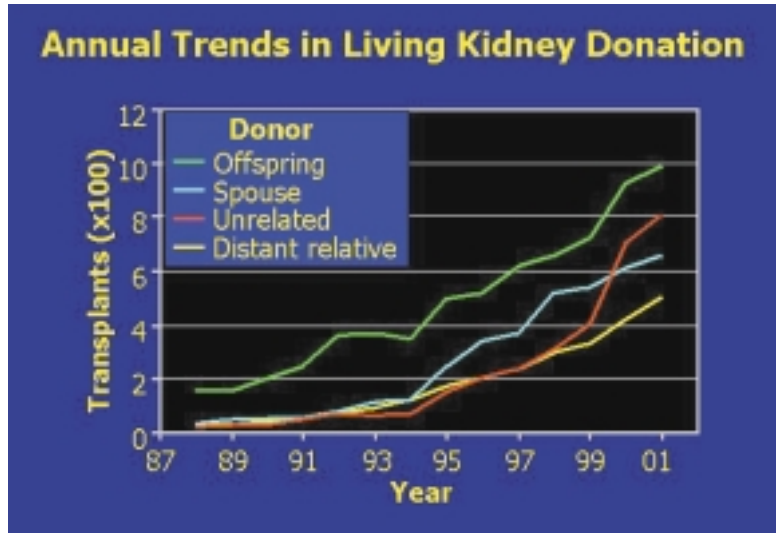
가 (7)
(3),

가 가
(4)
(5) (6).
1991

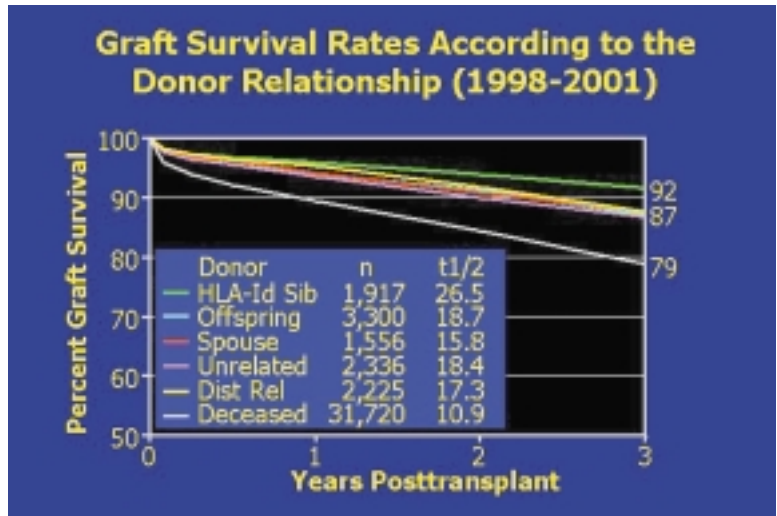
가
가
가

90
(7)
78.6%가 가
, 21.4%
가 가

26%
, 5 90.6%
가



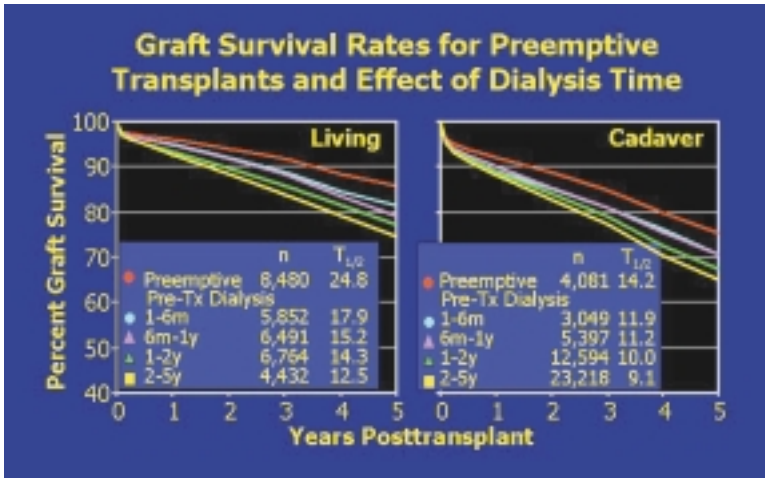
4. : UNOS (6)



5. : UNOS (6)

가
가
KONOS

가 .



6. : UNOS (6)

1990

1~2

(pre-emptive transplant recipients)가
가
가

UNOS (6)

(6).

가

가

OKT3 mycophenolate

mofetil(MMF)

가

2002

Seldinger

OKT3 ATG

MMF

10

9

12

가

1

3

3

3

(8).

가

3

가

7
16 - Channel CT

가 . 1990

가

가

가

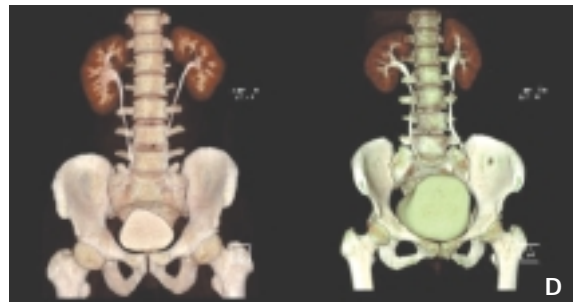
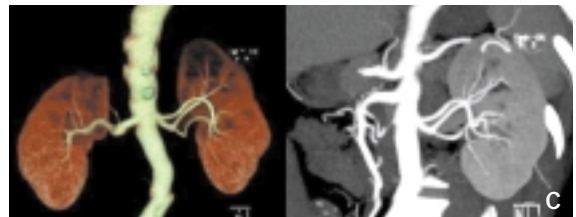
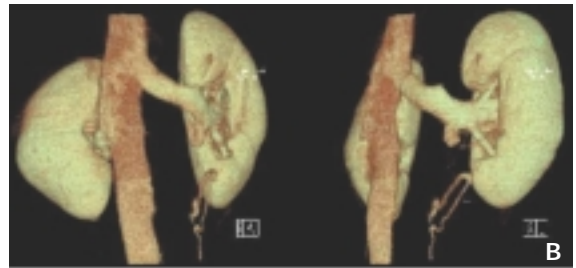
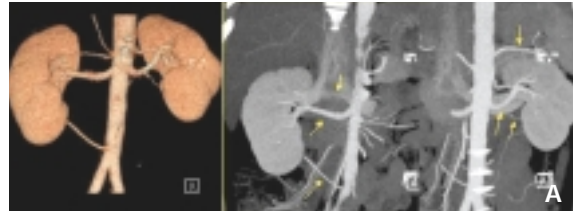
가

가

hand - assisted

gasless

가



A) Accessory Renal Arteries
 B) Accessory Renal Veins
 C) Early Branching Pattern of Renal Artery
 D) CT urography

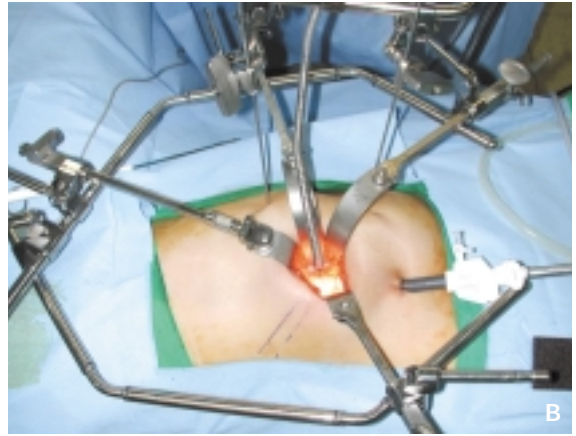
7. 16 - Channel CT

neoscopy - assisted donor nephrectomy video - assisted minilaparotomy surgery)

(8) 80%

(retroperito-

(5 cm)



- A)
- B)
- C) Endopouch
- D) Trocher

8. ()

(9, 10).

가 . 가

microemulsion cyclosporine, tacrolimus, MMF, OKT - 3, basilixmab, daclizumab, siroli-

mus, everolimus, campath 1H, FTY720, mycophe-
nolate sodium 가

(11, 12).

(
, HLA),
(
,),
(
,),

, tacro-
limus , 가

. Cyclosporine tacrolimus

cyclosporine

MMF 가 3

1 23.7%,

tacrolimus 6 57.1%

가

(13, 14), tacrolimus

basiliximab daclizumab

4

가

가

2

, MMF, carvedilol, doxazocin

가

ACE

가

가

3~5%

가

가

가

BK

B -

Ebstein - Barr

가

non -

, Hodgkin s

. B - , - , -

. BK

가 가
 . Tacrolimus MMF

(15).

1. 1996 ; 39 : 34 - 41
 2. 1998 ; 12 : 151 - 60
 3. 1999 ; 13 : 185 - 94

4. 2001. <http://www.ksn.or.kr/yo/ppt.files/frame.htm>
 5. 2002 . KONOS. 2003 7
 6. Cecka JM. The UNOS renal transplant registry. In Cecka JM, Terasaki PI, ed. Clinical Transplants 2002. Los Angeles, California : UCLA Tissue Typing Laboratory 2003 : 1 - 20, 367 - 77
 7. 2003 ; 17 : 69 - 72
 8. Kim SI, Kwon KH, Kim BS, Kim YS, Hong SJ, Yang SC, et al. Kidney transplantation in patients with crossmatch positive live donor : use of plasmapheresis and ATG. Am J Transplant 2003 ; 3(suppl 5) : 175
 9. Yang SC, Ko WJ, Byun YJ, Rha KH. Retroperitoneoscopy-assisted live donor nephrectomy : The Yonsei experience. J Urol 2001 ; 165 : 1099 - 102
 10. 2001 ; 15 : 172 - 6
 11. Joosten SA, Van Kooten C, Paul LC. Pathogenesis of chronic allograft rejection. Transplant Int 2003 ; 16 : 137 - 45
 12. Kim YS, Kim MS, Han DS, Kim DK, Myoung SM, Kim SI, et al. Evidence that the ratio of donor kidney weight to recipient body weight, donor age, and episodes of acute rejection correlate independently with live donor graft function. Transplantation 2002 ; 74 : 280 - 3
 13. Nam JH, Mun JI, Kim SI, Kang SW, Choi KH, Huh KB, et al. Beta - Cell dysfunction rather than insulin resistance is the main contributing factor for the development of post - renal transplantation diabetes mellitus. Transplantation 2001 ; 71 : 1417 - 23
 14. Cho YM, Park KS, Jung HS, Jeon HJ, Ahn C, Lee HK, et al. High incidence of tacrolimus - associated post - transplantation diabetes in the Korean renal allograft recipients according to American Diabetes Association criteria. Diabetes Care 2003 ; 26 : 1123 - 8
 15. BK 2002 ; 16 : 219 - 26