LONG-TERM OUTCOME OF HEMODIALYSIS PATIENTS: 30 YEARS' EXPERIENCE IN A SINGLE CENTER

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OBJECTIVES

The clinical demographics of chronic dialysis patients are changing according to time periods. We investigated long-term outcome of hemodialysis patients in our center.

METHODS

We reviewed the medical records of the patients starting hemodialysis (HD) between 1979 and 2004. A total of 736 patients (457 male, 279 female) were included. 274 patients started HD between 1979 to 1989, 257 patients between 1990 to 1994, 141 patients between 1995 to1999 and 64 patients between 2000 to 2004. The numbers of patients who transferred to peritoneal dialysis (PD) or kidney transplantation (KT) were 117 (15.9%) and 297 (40.4%). Patient survival rates were compared according to the transferred to PD or KT and the time period of starting HD.

RESULTS

During mean follow-up of 116.5±97.1 months, 342 patients were died and the 5-, 10-, 20- and 30-year survival rate was 72%, 56%, 44% and 34% in overall patients. The 10- and 20-year survival rate for the patients transferred to KT was 86% and 76%. However 10- and 20-year survival rate of HD only patients was 32% and 16% and that of transferred to PD patients was 34% and 19%, respectively. The survival rate of transferred to KT patients was significantly higher than those of HD only or PD patients ($p<0.000$). There was a trend toward older age at the time of starting HD over three decades and the survival rate of patients was not significantly different according to time period.

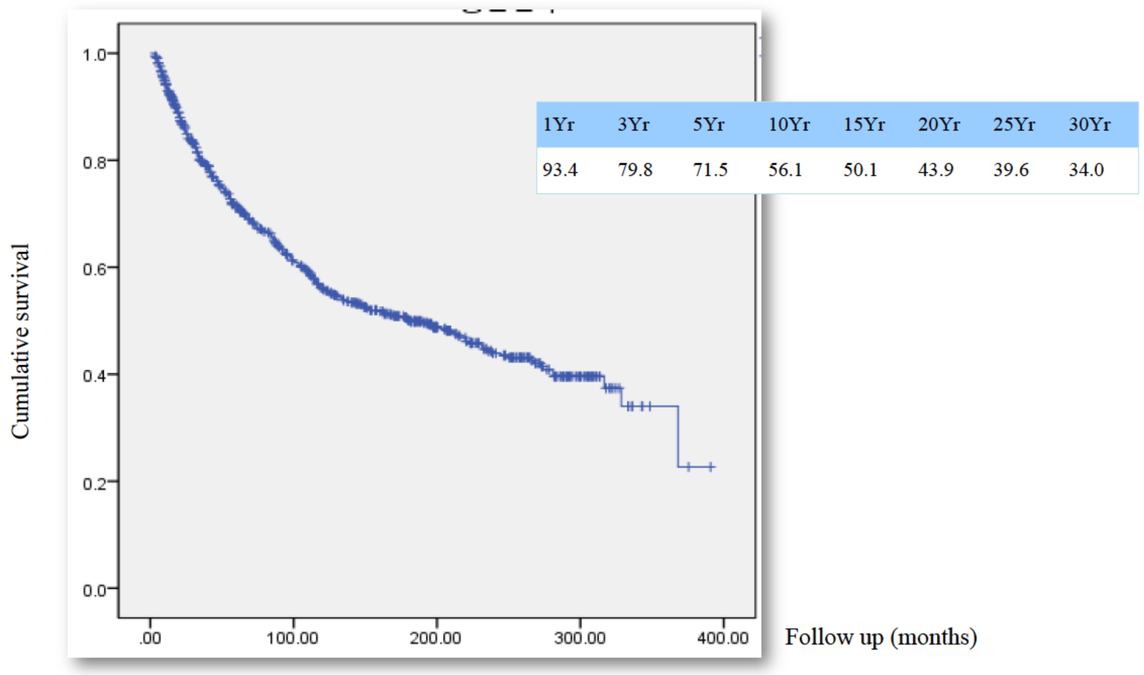
CONCLUSIONS

In this study, the survival benefit associated with KT was observed. However, a trend of patient survival was not changed over three decades, although the improvement in performance of membrane and quality of water.

Cause of Deaths

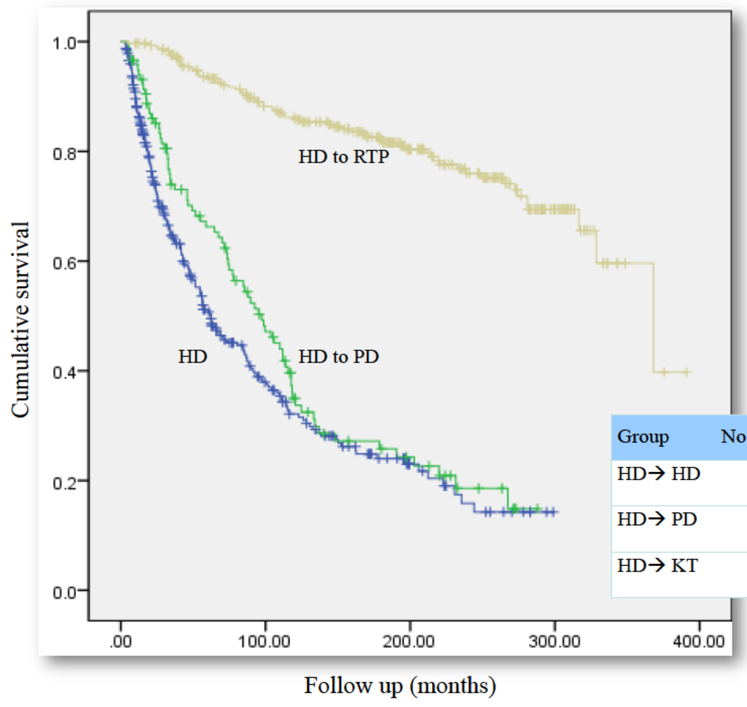
Causes	No. of patients (n=342, %)
Cardiovascular accident	134 (39.0)
Cerebrovascular disease	72 (21.1)
Infection	52 (15.2)
Malignancy	15 (4.4)
Malnutrition	6 (1.8)
Treatment refuse	6 (1.8)
Liver disease	4 (1.2)
Others	27 (7.9)
Unknown	26 (7.6)

Overall survival rate



1Yr	3Yr	5Yr	10Yr	15Yr	20Yr	25Yr	30Yr
93.4	79.8	71.5	56.1	50.1	43.9	39.6	34.0

Overall survival rate according to RRT conversion



Group	No. of patients	1Yr	3Yr	5Yr	10Yr	20Yr
HD→ HD	323	86.6	64.3	50.8	31.6	15.9
HD→ PD	117	94.8	73.0	66.3	33.7	18.6
HD→ KT	297	99.7	99.0	93.2	85.8	76.0

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