

**Title of Paper:** Health-related quality of life, sexual health, and mental well-being in young men after paediatric renal transplantation.

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**Abstract:**

**BACKGROUND.** A child with chronic kidney disease or renal transplantation (RTx) may have an increased risk for psychosocial problems and impaired mental health. So far, data on psychosocial adjustment and health-related quality of life (HRQOL) are scarce but according to recent reports there are reasonable prospects for good outcome among this patient group. The aim of this study was to assess the impact of RTx during childhood or adolescence on the young adult men's HRQOL, sexual functioning and mental well-being.

**METHODS.** We conducted a cross-sectional study of 29 young men aged 28.1 years (range 19.0–41.8) having undergone RTx during childhood or adolescence. The mean age at RTx was 9.0 years and the duration of follow-up was 18.8 years. Fifty-six age- and gender-matched healthy men served as controls. We used RAND-36 to assess HRQOL, Derogatis Interview for Sexual Functioning – Self Report (DISF-SR) to assess sexual functioning and the Aggression Questionnaire (AQ) and Beck Depression Inventory (BDI) to assess mental well-being.

**RESULTS.** The RTx patients showed worse HRQOL than their healthy peers according to RAND-36 mean total score (74.4 vs. 87.9,  $p = 0.002$ ). Of the 8 subscales of RAND-36, only the results in role/emotional and social functioning were comparable between the groups. In DISF-SR, the RTx recipients scored on average lower in sexual behaviour (13.7 vs. 17.3,  $p = 0.040$ ) and orgasm (15.6 vs. 18.6,  $p = 0.004$ ) in comparison with the controls whereas the total scores were statistically similar ( $p = 0.201$ ). The mental health was worse among the RTx patients than in the controls according to the average total scores in BDI and AQ (3.9 vs. 1.8,  $p = 0.042$  and 63.4 vs. 56.9,  $p = 0.019$ , respectively). The difference in AQ was due to higher hostility score in the RTx group in comparison with that of the controls (17.9 vs. 13.9,  $p < 0.001$ ).

**CONCLUSIONS.** HRQOL, sexual health and mental well-being seems to be widely impaired in young men after paediatric RTx. Depression may be a significant factor affecting psychosocial survival of the patients. Continuous life-long immunosuppressive medication and fear of decreasing graft function cast a shadow over these patients.

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