

# Can robot-assisted renal transplantation provide higher quality of life than open renal transplantation during the early postoperative period?

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## Abstract

**Purpose:** To investigate the quality of life (QoL) in patients with end-stage renal disease who underwent open or robot-assisted renal transplantation (ORT and RART). **Materials and Methods:** Patients who underwent ORT and RART at Bakirkoy Sadi Konuk Training and Research Hospital between June 2016 and December 2018 constituted the target population of this study. The patient group was divided into two groups as per the surgical technique (i.e., open vs. robot-assisted). Demographic data, preoperative and postoperative data of all patients were collected prospectively. The QoL of the patients was assessed preoperatively and on the postoperative 30th day. **Results:** 67 patients who underwent ORT and 60 patients who underwent RART were included. The mean patient age and BMI were calculated as  $40,9 \pm 11,6$  years and  $24,4 \pm 2,9$  kg/m<sup>2</sup>, respectively. While mean total ischemia time was shorter in the 'open' group, incision length, duration of surgical drainage and hospital stay were shorter in the 'robot-assisted' group. The physical component scores of the QoL questionnaire revealed that postoperative impairment of quality of life was more significant in the ORT than the RART. **Conclusion:** Patients who underwent RART have a higher QoL than the patients who were treated with ORT as per their self-reported QoL scores in the early postoperative period. **Keywords:** End-stage renal disease; Open renal transplantation; Robot-assisted renal transplantation; Quality of life

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