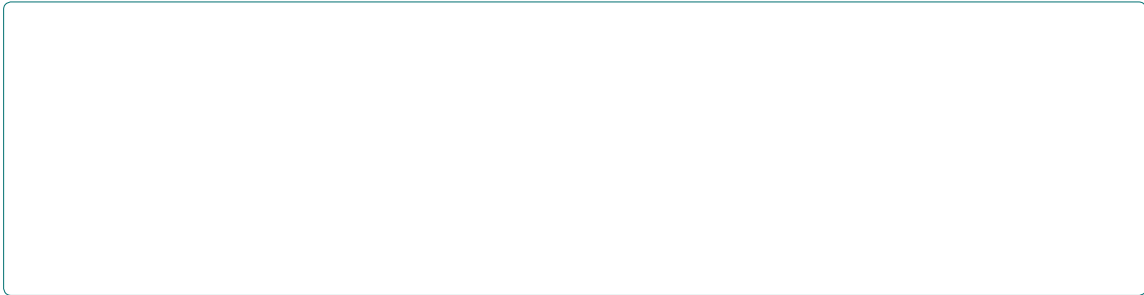




Advancements in Kidney Transplantation: A Review of Current Trends and Future Directions

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Keywords: Kidney transplantation; Real-time monitoring; Transplant rejection; Kidney donor; Immunosuppression; Life expectancy; Long-term outcomes

Kidney transplantation is the gold standard of end-stage renal disease (ESRD). Over the past few decades, transplantation has become the preferred option for patients with ESRD, offering a significant improvement in quality of life and survival compared to dialysis [1]. This review highlights the current trends and challenges in kidney transplantation, including the use of living donors, the impact of immunosuppression, and the importance of long-term follow-up. Tailored immunosuppression regimens are essential for preventing rejection and ensuring long-term graft survival. Additionally, the use of deceased donor kidneys (DDK) and the impact of donor characteristics on outcomes are discussed. Looking ahead, emerging technologies and personalized medicine hold promise for further improving kidney transplantation outcomes.

highlighting the importance of donor selection and the impact of immunosuppression on long-term outcomes. The use of living donor kidneys (LDK) is associated with better long-term survival and graft function compared to deceased donor kidneys (DDK) [2,3]. This is likely due to the better matching of donor and recipient characteristics in LDK. Additionally, the use of immunosuppression is essential for preventing rejection and ensuring long-term graft survival. However, immunosuppression also increases the risk of infection and malignancy, highlighting the need for personalized immunosuppression regimens [4-6]. The use of deceased donor kidneys (DDK) is also an important option for patients with ESRD. However, the impact of donor characteristics on outcomes is still unclear. Further research is needed to optimize the use of DDK and to improve long-term outcomes for patients receiving DDK [7-9].

Introduction: Kidney transplantation is a life-saving procedure for patients with end-stage renal disease (ESRD). The procedure involves replacing a failed kidney with a healthy one from a donor. The success of the procedure depends on several factors, including donor selection, recipient health, and the use of immunosuppression.

Living donor kidney transplantation (LDK) is associated with better long-term survival and graft function compared to deceased donor kidney transplantation (DDK) [2,3]. This is likely due to the better matching of donor and recipient characteristics in LDK. Additionally, the use of immunosuppression is essential for preventing rejection and ensuring long-term graft survival. However, immunosuppression also increases the risk of infection and malignancy, highlighting the need for personalized immunosuppression regimens [4-6].

The use of deceased donor kidneys (DDK) is also an important option for patients with ESRD. However, the impact of donor characteristics on outcomes is still unclear. Further research is needed to optimize the use of DDK and to improve long-term outcomes for patients receiving DDK [7-9].

Conclusion: Advancing kidney transplantation outcomes requires a comprehensive approach, including donor selection, recipient health, and personalized immunosuppression regimens. Continued research and innovation in transplantation medicine are essential for improving the quality of life and survival of patients with ESRD.

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distal pancreatectomy for benign inflammatory disease.

Bolzano G, Ma f P, Nano R, Zerbi A, Venturini M, et al. (2013)

Balzano G, Ma f P, Nano R, Mercalli A, Melzi R, et al. (2016)
Transplantation in Patients Requiring Pancreatectomy: A Broader Spectrum of

replication of an open technique through a minimal access approach
