Title: *Building a Transplant Onconephrology Program: A Quality Improvement Initiative at a Tertiary Referral Center*

Authors: Natacha Rodrigues[1,2], Manuel Lopes da Silva[1], Carolina Branco[1,2], Fernando Abreu[1,2], Alice Santana[1], José António Lopes[1,2]

Affiliations:

1- Division of Nephrology and Renal Transplantation, Unidade Local de Saúde Santa Maria, Lisbon, Portugal

2- Faculdade de Medicina da Universidade de Lisboa, Lisbon, Portugal

Background: Kidney transplant candidates and recipients with current or prior malignancies represent a growing and increasingly complex population. Clinical decision-making requires balancing oncologic risk, transplant eligibility, immunosuppression management, and allograft preservation. To address these challenges, a dedicated Transplant Onconephrology Clinic was established within our Kidney Transplant Unit.

Intervention: The clinic provides multidisciplinary assessment across the transplant continuum. Pre-transplant consultations focus on transplant eligibility in patients with prior malignancy or hematologic disorders, including multiple myeloma and related plasma cell dyscrasias. Post-transplant consultations focus on newly diagnosed malignancies, optimization of immunosuppression during cancer treatment, and management of kidney complications related to cancer or anticancer therapies. We reviewed all patients evaluated between January 2024 and January 2026.

Results: A total of 75 patients were evaluated, including 15 pre-transplant candidates (20%) and 60 kidney transplant recipients (80%). Among pre-transplant referrals, the most common indications were previous solid malignancy (47%), multiple myeloma (33%), and other hematologic disorders (20%). Following multidisciplinary assessment, 47% were considered eligible for transplantation, while 33% required additional oncologic surveillance and 20% required further treatment before listing. Among post-transplant referrals, the most common malignancies were skin cancer (30%), genitourinary malignancies (20%), and hematologic malignancies (17%). The most frequent referral indications were immunosuppression management (70%), multidisciplinary treatment planning (40%), assessment of cancer therapy-related nephrotoxicity (20%), and evaluation of kidney complications related to malignancy (17%). Immunosuppression was modified in 70% of recipients, most commonly through antimetabolite withdrawal (40%) and/or conversion to an mTOR inhibitor-based regimen (30%). Three recipients were evaluated for immune checkpoint inhibitor therapy. Systemic anticancer therapy was administered in 60%. At follow-up, graft function remained stable in 80% of recipients, while graft loss and mortality occurred in 5% and 10%, respectively.

Conclusions: Implementation of a dedicated Transplant Onconephrology Clinic provided a structured framework for managing oncologic issues before and after kidney transplantation. This model facilitated individualized decision-making regarding transplant eligibility, cancer treatment, immunosuppression management, and allograft preservation, highlighting the value of integrated multidisciplinary care in this high-risk population.