854 COMMENTARY

## Dermatologic Manifestations in Kidney Transplant Recipients\*



## Manifestaciones dermatológicas en los pacientes con trasplante renal

In 2017, Spain once again became the leading country worldwide in organ and tissue donation and transplantation. In that year alone, Spanish hospitals performed 5261 transplants, up 9% from the previous year. Of these, 3269 were kidney transplants and 57 were in children. The success of our transplant model is such that 29 000 people in Spain are now living with a functioning kidney transplant. The maximum posttransplant survival time is 35 years (compared to 41 years for the world in general). That said, there are still some 27 000 patients with kidney failure who are still on dialysis.<sup>1</sup>

The survival of transplanted organs depends on lifetime immunosuppressive medication, but this treatment increases the risk of infections and cancer.<sup>2</sup> The switch from classic immunosuppressive agents to sirolimus in transplant recipients with a history of 1 or more nonmelanoma skin cancers has been associated with a reduced incidence of subsequent tumors because, in addition to its immunosuppressive properties, sirolimus also has antiproliferative and antiangiogenic effects.<sup>3</sup>

Since the number of organ transplantations is increasing and recipients are living for longer, we are now seeing unusual dermatological manifestations that should be borne in mind when assessing these patients. The incidence of malignancies, such as angiosarcoma and posttransplant lymphoproliferative disorder, is growing. Inflammatory diseases in this setting include inflammatory bowel disease, presenting with both specific (personal observation) and nonspecific manifestations. Other conditions include renal allograft rejection—associated bullous pemphigoid and steal syndrome arising from the use of sirolimus, which, as mentioned, has antiangiogenic properties. Steal syndrome usually affects dialysis patients who have undergone arteriovenous fistula placement, but can also affect transplant recipients in whom this access is maintained. In such cases,

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it is advisable to check for signs of ischemia in the arm or

leg with the fistula before administering the drug.8

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