

Comment on “Cutaneous viral infections in patients after kidney transplantation: risk factors”

As for the potential effect of induction therapy with monoclonal and polyclonal antibodies on the increased incidence of viral infections, it should be noted that induction therapy was not common at the time when most of the analyzed kidney transplantation procedures were performed. In contrast, induction therapy has been recently increasingly used, and, at our institution, it was used in nearly 40% of kidney recipients last year. Of note, in the study group, 6 patients with acute transplant rejection received Muromonab-CD3 (Orthoclone OKT3) and 4 patients received anti-thymocyte globulin (ATG) including 1 treated both with ATG and OKT3. Viral warts were found in 3 patients in this group: 1 patient treated with OKT3, 1 with ATG, and 1 who received both ATG and OKT3. In all those patients, viral warts were located on the hands, and they were numerous (more than 5 lesions) in the patient who received both ATG and OKT3.

It is expected that with the increasing use of induction therapy prior to transplantation procedure, the problem of viral infections and the development of cancer will continue to grow. So we agree with the opinion that further observations are indicated in patients after kidney transplantation who are subjected to many years of immunosuppressive therapy. In the last years, we have observed the development of a treatment strategy, in which azathioprine is being replaced by mycophenolate mofetil and cyclosporine A (CyA) by tacrolimus (TAC). In our unit, the doses of CyA and TAC were adjusted based on their whole blood concentration (TAC, 12.5 ng/ml in the first month and 7.7 ng/ml at 6 months, while CyA [C2 levels] were 1478 ng/ml and 982 ng/ml, respectively).

In the literature, there are reports of a possible malignant transformation of both viral warts and seborrheic keratosis, although it was not observed in our study group. Furthermore, the vast majority of skin tumors observed in our group of patients were located on the face, where the incidence of viral warts is not common. Of the 187 subjects diagnosed with viral warts, multiple lesions (defined as more than 5) were present only in 22 patients and were located mainly on the hands. Unfortunately, we did not analyze the relationship between the number of common warts and the type or time of immunosuppressive therapy. No distinction was made between viral warts located on the back or on the palmar surface of the hands. All patients diagnosed with viral warts due to immunosuppressive therapy received an appropriate treatment. The most common mode of treatment was cryotherapy, which was effective in most patients, especially in those with single warts. Additionally, formulations containing salicylic acid, lactic acid, fluorouracil, and imiquimod were used. Unfortunately, we did not perform any analyses to demonstrate which of the treatment methods was the most effective, and what was the period of

Authors' reply Thank you very much for your interesting comments regarding our article.¹ It should be emphasized that viral infections and skin cancer are a frequent and serious problem in transplant recipients undergoing immunosuppressive therapy. In addition, owing to a continuous increase in the number of transplantations and prolongation of graft survival, we can expect that the population of patients affected by this problem will continue to grow.

remission of lesions in individual cases. In 3 cases, extensive and treatment-resistant viral warts were observed. One patient underwent therapy with imiquimod but no remission was observed. In the remaining 2 cases, this type of treatment was not possible for economic reasons. The Dermatology Life Quality Index was not measured.

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REFERENCES

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