Net Letter

Successful treatment of multiple facial basal cell carcinomas with imiquimod in a patient with chronic renal failure

Sir,

We would like to report a case of multiple, pigmented basal cell carcinomas (BCCs) on the face in a patient with chronic renal failure, which responded dramatically to imiquimod therapy.

A 49-year-old woman, with chronic renal failure presented with dark brown patches on her face for 8 years [Figure 1a]. These were most prominent on her cheeks and had increased in size and number over the years. Dermoscopic examination revealed large, gray-blue ovoid nests, linear and arborizing vessels, maple leaf-like and scar-like areas as well as ulcerations [Figure 1b], which were characteristic for BCC.[1] The diagnosis was confirmed by skin biopsy from one of the representative lesions [Figure 2]. The patient was advised topical application of imiquimod (5%) cream, 5 days a week. This was continued until there was complete resolution on clinical and dermoscopic examination [Figure 3] in approximately 1 year. Clinical and dermoscopic follow-up of the patient demonstrated no sign of recurrence after 10 months.

BCC is the most common form of skin cancer and accounts for approximately 80% of non-melanoma skin cancers. The major treatment modalities for BCC include electrodesiccation, cryotherapy and curettage, which are often selected for low-risk lesions. However, surgical excision is considered the gold standard because it permits assessment of histopathologic margins.[2] However, excision of multiple facial lesions is generally not preferred due to unsatisfactory cosmetic outcomes. Imiquimod, a toll-like receptor-7 agonist, which belongs to a novel class of immune response modifiers, is a topical agent for the treatment of superficial BCC. It decreases tumor cell proliferation, increases tumor apoptosis and inhibits angiogenesis. It is also a potent inducer of interferon α *in vivo*, which has potent antitumor and antiviral activity.[2]

Renal transplantation is known to be associated with an increased incidence of non-melanoma skin cancers possibly related to use of immunosuppressant drugs. Both squamous cell carcinoma and BCC, the two major histological types of non-melanoma skin cancers, exhibit a more aggressive biological and clinical course in renal transplant recipients, with higher rates of recurrence and mortality than the general population.[3] The incidence of BCC in the general white population is between 18% and 40%[4] while a study in The Netherlands, revealed that the incidence of BCC in transplant recipients was 10 times higher than the general population.[5]

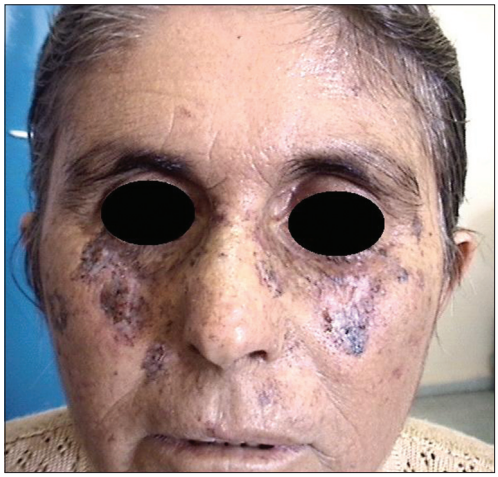

Figure 1a: Multiple, facial basal cell carcinomas before treatment

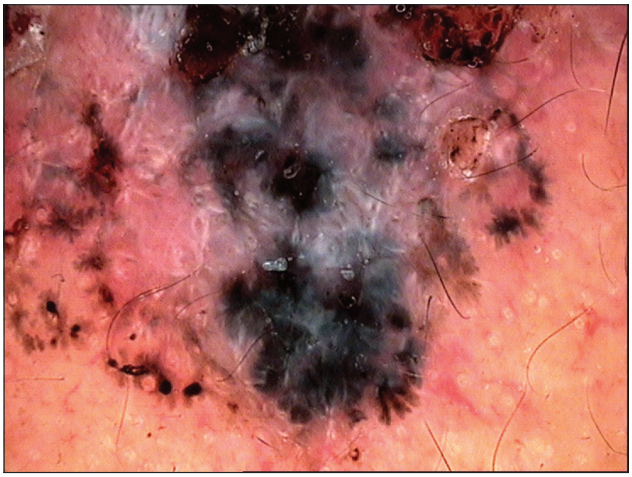

Figure 1b: Gray blue ovoid nests and scar like areas on dermoscopy

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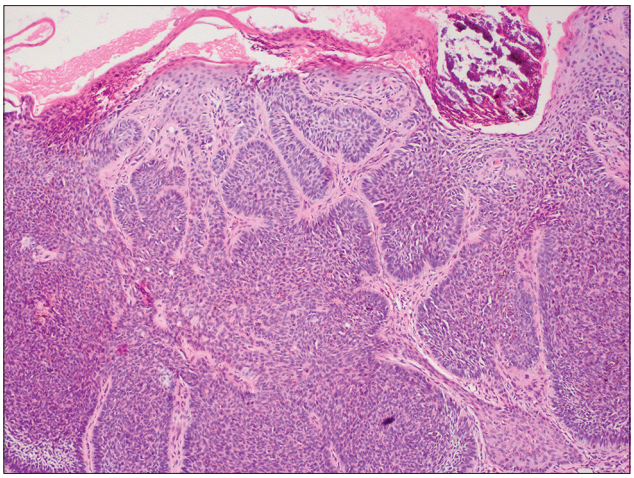

Figure 2: Groups of basaloid cells with peripheral palisading in BCC (H and E, ×100)

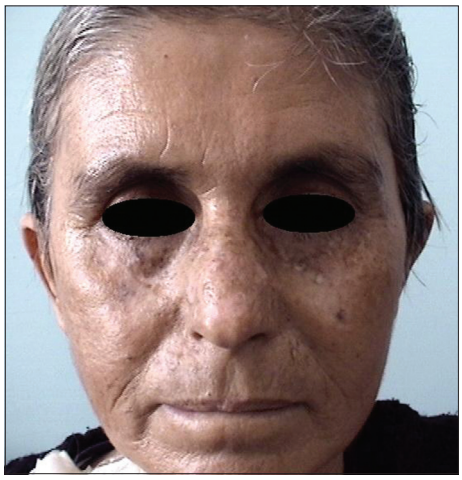

Figure 3a: Significant clearance after treatment with imiquimod

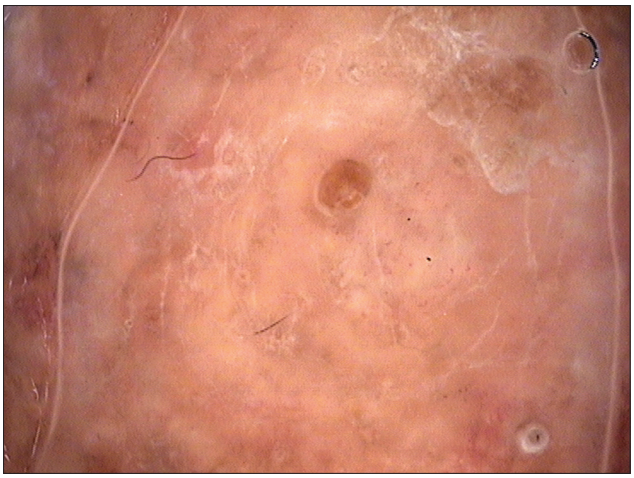

Figure 3b: Clearance of dermoscopic findings after treatment with imiquimod

End stage renal disease is also a cause of immunosuppression in itself as both T and B-cell functions are reported to be altered possibly due to the uremic state.[6,7] Though there is an increased prevalence of various neoplasms in this setting,[6] specific data on skin neoplasms has not been reported so far.

Our patient had developed multiple and progressive facial lesions of BCC following a diagnosis of chronic renal failure. Her only medications were the anti-hypertensives amlodipine besylate and olmesartan medoxomil. Such multiple lesions may be attributable to the immunosuppression occurring as a part of end stage renal disease . Excision was not considered appropriate for multiple lesions on the face because of the risk of a poor cosmetic outcome Treatment with imiquimod 5% cream led to significant improvement in all lesions.

Imiquimod 5% cream is likely to be a promising agent for the treatment of multiple BCCs in similar settings.

Sedef Bayata, Aylin Türel Ermertcan, Gülsüm Gençoğlan, Görkem Eskiizmir[1], Peyker Temiz[2]

Departments of Dermatology, [1]Otorhinolaryngology, and [2]Pathology, Faculty of Medicine, Celal Bayar University, Manisa, Turkey

Address for correspondenc: Dr. Aylin Türel Ermertcan, Department of Dermatology, Celal Bayar University School of Medicine, 45010 Manisa, Turkey.
E-mail: draylinturel@hotmail.com

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