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Letter to Editor

Prolonged Use of Voriconazole Associated with the Development of Squamous Cell Carcinoma in An Immunosuppressed Patient

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Dear Editor,

The patient is a 19 years old male diagnosed with chronic granulomatous disease in childhood. Throughout his life, he has faced multiple complications related to this disease, the most significant being severe pulmonary aspergillosis diagnosed in 2012. This condition was treated with voriconazole, which he has used since then.

The patient reports that approximately five years after starting voriconazole treatment, he began developing erythematous, scaly lesions distributed across his skin, particularly in sun-exposed areas. Biopsies of these lesions revealed multiple squamous cell carcinomas. He notes that new lesions continue to appear despite minimal sun exposure.

On dermatological examination, multiple hyperkeratotic lesions were observed, some with crusting and others with erythematous bases, located on the scalp, face, and limbs. Notably, a large ulcerated lesion was present in the left parietal region, previously diagnosed as SCC and awaiting surgical management. Recently, eight additional biopsied lesions were confirmed as SCCs.

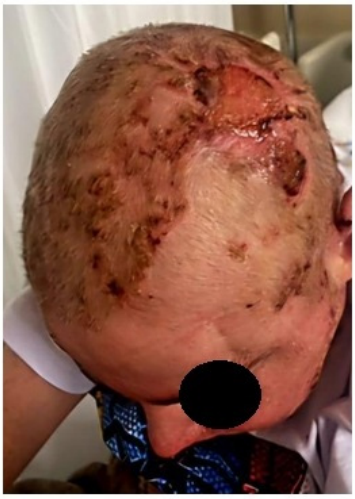

Figure 1: Large ulcerated lesion in the left parietal region.

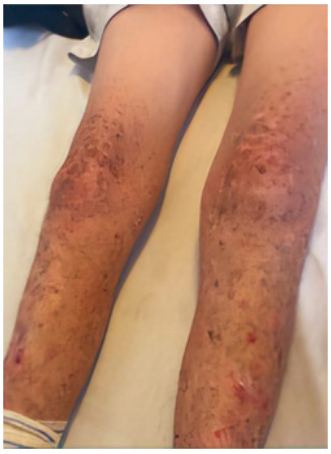

Figure 2: Multiple hyperkeratotic lesions, some with crusting and others with erythematous bases, observed on the lower limbs.

Currently, a plan is underway to replace voriconazole with isavuconazole due to its superior safety profile regarding photosensitivity.

Discussion

Voriconazole is a broad-spectrum antifungal agent used in the treatment of invasive fungal infections, particularly in immunocompromised patients. However, prolonged use has been associated with dermatological side effects, including photosensitivity, which may predispose patients to the development of premalignant and malignant skin lesions, such as Squamous Cell Carcinoma (SCC).

The use of voriconazole is essential in the treatment of Asper-

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gillus infections in immunocompromised patients, often requiring lifelong therapy. Discontinuation of this drug can lead to infection reactivation within a year, as demonstrated in a study by Dong S. and colleagues.

However, prolonged administration of voriconazole may result in significant side effects, such as photosensitivity and phototoxicity, particularly in immunosuppressed patients. A study conducted in Japan also highlighted that such patients have a poor prognosis regarding the development of Squamous Cell Carcinoma (SCC). Additionally, individuals with preexisting actinic keratoses are at higher risk of developing SCC.

It is noteworthy that neoplastic lesions induced by prolonged voriconazole use are not limited to immunocompromised patients. Case reports indicate that such lesions can also develop in immunocompetent individuals.

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