Abstract N°: ID-1499

Topic: Adverse drug reactions, TEN

Multiple Ingrown Nails Induced by Anti-EGFR Therapy: A Rare yet Debilitating Adverse Effect

Wydad Boudi*[1], Yasmine Farai[1], Mohamed El Amraoui[1], Youssef Zemmez[1], Jjawad El-Azhari[1], Rachid Frikh[1]

[1]Mohamed V Military Hospital Rabat, Morocco, Dermatology, Rabat, Morocco

Introduction

The advent of tyrosine kinase inhibitors (TKIs) targeting the EGFR receptor—such as osimertinib (Tagrisso®)—has fundamentally reshaped the management of non-small cell lung cancer (NSCLC) harboring activating mutations. While their safety profile is generally favorable, cutaneous and nail toxicities can emerge, sometimes appearing late in the course of treatment or following a therapeutic switch. Although dermatological side effects are well-documented, nail complications like ingrown nails (onychocryptosis) remain underreported, particularly in the elderly population. We report a clinical case of multiple ingrown nails affecting both the toes and fingers, occurring rapidly after a medication substitution.

Materials and Methods

We present the case of a 90-year-old patient with a medical history of hypertension managed by amlodipine and insulin-dependent diabetes. She is currently being treated for EGFR-mutated NSCLC. Her initial regimen consisted of osimertinib (Tagrisso®), one tablet daily, which she tolerated well for nine months without notable incidents.

Following a change in therapeutic strategy, the patient was transitioned to Miralta® (a generic form of erlotinib). Within fifteen days of starting this new treatment, she developed escalating pain in her extremities accompanied by localized inflammation. Clinical examination revealed multiple ingrown nails involving not only the toes but also the fingers, presenting as painful paronychia. Notably, there was no fever or signs of systemic infection. A dermatological consultation was requested, and a local regimen of anti-inflammatory and antiseptic treatments was initiated to alleviate her discomfort and manage the lesions.

Results

Nail-related side effects induced by anti-EGFR therapies are significantly less frequent than cutaneous rashes or xerosis; however, their functional impact and the associated pain can be substantial, particularly in elderly and frail patients. The rapid onset of lesions following the transition from osimertinib to erlotinib suggests a strong temporal correlation. While both molecules belong to the same class, their toxicity profiles differ: osimertinib is generally better tolerated from a dermatological standpoint than first-generation inhibitors like erlotinib.

In this patient's case, the convergence of advanced age, diabetes, and likely impaired vascularization—combined with the switch in targeted therapy—undoubtedly predisposed her to such extensive nail complications. The simultaneous involvement of both fingers and toes compounds the functional burden, particularly regarding activities of daily living. This case underscores the vital importance of vigilant monitoring whenever a treatment is modified, even when staying within the same therapeutic class.

Conclusions

Nail-related side effects induced by anti-EGFR therapies are significantly less frequent than cutaneous rashes or xerosis; however, their functional impact and the associated pain can be substantial, particularly in elderly and frail patients. The rapid onset of lesions following the transition from osimertinib to erlotinib suggests a strong temporal correlation. While both molecules belong to the same class, their toxicity profiles differ: osimertinib is generally better tolerated from a dermatological standpoint than first-generation inhibitors like erlotinib.

In this patient's case, the convergence of advanced age, diabetes, and likely impaired vascularization—combined with the switch in targeted therapy—undoubtedly predisposed her to such extensive nail complications. The simultaneous involvement of both fingers and toes compounds the functional burden, particularly regarding activities of daily living. This case underscores the vital importance of vigilant monitoring whenever a treatment is modified, even when staying within the same therapeutic class.