ADVERSE DRUG REACTIONS, INCLUDING SJS, TEN

TOPICAL β-BLOCKERS FOR THE MANAGEMENT OF PARONYCHIA AND PYOGENIC GRANULOMA-LIKE LESIONS OF THE PERIUNGUAL AREA SECONDARY TO THERAPY WITH EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITOR

Pietro Sollena [1] - Maria Mannino [1] - Alessandra Maria Calegari [2] - Armando Orlandi [2] - Ettore D'argento [2] - Ketty Peris [1]

Catholic University Of The Sacred Heart - Fondazione Policlinico Gemelli-irccs, Dermatology, Rome, Italy [1] - Catholic University Of The Sacred Heart - Fondazione Policlinico Gemelli-irccs, Oncology, Rome, Italy [2]

Background: Nail toxicities are a well-recognized side effect of systemic anticancer therapies. Epidermal Growth Factor Receptor Inhibitors (EGFR-I) are particularly associated with abnormalities of the nail folds, such as paronychia and pyogenic granuloma-like lesions, which occur in 10% and 30% of cases, respectively. Multiple nails are usually affected, the great toe being the most common. These adverse reactions significantly impair patient's quality of life and compliance to anticancer treatment. Numerous therapeutic options are currently available, including topical corticosteroids combined with topical antibiotics, oral tetracyclines, adapalene, cryotherapy, topical silver nitrate and phenol chemical matricectomy, with partial clinical benefit in most cases. Recently, topical β-blockers are emerging as a novel non-invasive treatment option, basing on the knowledge that pyogenic granulomas are benign vascular proliferations with variable degree of expression of β-adrenergic receptors. These receptors drive angiogenesis and vascular proliferation through the induction of vascular endothelial growth factor and basic fibroblast derived growth factor, plus inhibition of endothelial cell apoptosis. Thus, β-blockers are likely to be effective on pyogenic granulomas by causing vasoconstriction, decreasing angiogenesis and inducing endothelial cell apoptosis.

Observation: We investigated the efficacy of topical timolol drops (0,5%) applied once daily on paronychia and periungual pyogenic granuloma-like lesions (total number of lesions: 13) in six patients receiving systemic anticancer treatment with EGFR-I. Patients were followed-up at days 15, 30, 60. Regression of 7/13 lesions was achieved in 3/6 patients. Neither local nor systemic side-effects were observed.

Key message: Our case series showed that topical β-blockers are a good therapeutic option for treatment of pyogenic granuloma-like lesions providing higher level of patient's

satisfaction and cosmetic results.