



SKIN CANCER (OTHER THAN MELANOMA)

DEVELOPMENT OF MULTIPLE BOWEN'S DISEASE IN A PATIENT TREATED WITH RUXOLITINIB FOR POLYCYTHEMIA VERA

N. Rivetti⁽¹⁾ - N. Rizzo⁽²⁾ - C. Doglioni⁽²⁾ - P. Gallotti⁽³⁾

Ambulatorio Di Dermatologia, Clinical Institute "beato Matteo", Vigevano, Italy⁽¹⁾ - Pathology Unit, Irccs San Raffaele Scientific Institute, Milano, Italy⁽²⁾ - Internal And Emergency Medicine And Centre For Applied Clinical Research (ce.r.c.a.), Clinical Institute "beato Matteo", Vigevano, Italy⁽³⁾

Background: Ruxolitinib is a Janus kinase inhibitor approved by the US Food and Drug Administration for the treatment of patients with myelofibrosis and polycythemia vera. Common side effects associated with this drug are anemia, thrombocytopenia, and fatigue, which rarely lead to drug discontinuation. Current ruxolitinib prescriber information labels also warn about the risk of non-melanoma skin cancers.

Observation: a 53-year-old woman with polycythemia vera was initially treated with phlebotomy, followed by hydroxyurea and interferon alpha. The patient, who denied a family or personal history of skin cancers, appeared as Fitzpatrick skin type II with mild photodamage. Nine years after diagnosis, a therapy with ruxolitinib was started at the dose of 10 mg twice daily for about 7 years, at which point the dose was increased to 15 mg twice daily. Six months after the dose increase, the patient developed multiple erythematous and hyperkeratotic plaques on her chest, back, abdomen and legs. Histological examination confirmed the clinical suspicion of Bowen's disease, and an association with ruxolitinib was suspected. The thinner lesions were treated with cryotherapy, while the thicker ones were surgically removed. Currently the patient is still taking ruxolitinib, with routine skin examination every 3 months, to early identify the occurrence of Bowen's disease.

Key message: the association between ruxolitinib and non-melanoma skin cancers has been previously described in the literature, in particular the development of multiple basal cell carcinomas, aggressive squamous cell carcinomas and eruptive keratoacanthomas. To our knowledge, this is the first report of multiple Bowen's disease development during therapy with ruxolitinib. Further research is needed on the role and dosage of ruxolitinib in the development of skin cancers. Dermatologists should be aware that patients on ruxolitinib therapy, particularly those with positive history of skin cancer, should undergo full body skin checks at least every 6 months.

