**SEVERE PHOTOTOXICITY REACTION ASSOCIATED WITH VANDETANIB: A CASE REPORT**

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**BACKGROUND AND IMPORTANCE**

Vandetanib → tyrosine kinase inhibitor used for the treatment of metastatic medullary thyroid cancer (MMTC). This drug has been associated with phototoxicity, but rarely severe.

**AIM AND OBJECTIVES**

To report a case of severe phototoxicity reaction associated with vandetanib.

**MATERIAL AND METHODS**

- The clinical management of a case with rare phototoxicity adverse reaction was described.
- Electronic medical records were used to collect patient data: baseline clinical context, adverse events, treatment, and clinical evolution.
- Naranjo algorithm → used by hospital pharmacist to stablish the causality of phototoxicity.

**RESULTS**

- An 82-year-old man newly diagnosed with MMTC started treatment with vandetanib.
- After 12 days, he presented slight rash in dorsal region. The patient received one radiotherapy session.
- 17 days after starting vandetanib, he visited Emergency department for generalised erythema (on face, neck, upper and lower limbs), flushing and pruritus, related to brief sun exposure. The patient was treated with single dose intramuscular methylprednisolone and oral dexchlorpheniramine. Vandetanib and radiotherapy were discontinued.
  - 5 days later, the patient presented severe deterioration, progression of erythema and intense edema in hands, feet and face. Deflazacort was prescribed. After diagnosis by Dermatology department of acute phototoxic eruption, treatment was started with prednisone 45 mg/day for 7 days with progressive decrease, emollients and topical methylprednisolone.
- Between days 26-40, gradual improvement of edema and erythema was observed without appearance of new toxicity. Prednisone dose was reduced. Progressively, desquamation and scabs were observed on both hands, with improvement of leg and foot ulcers. Poor pain control required tapentadol 25 mg/12 hours.
- On day 62, there was a worsening with increased erythema since oral prednisone was reduced. Treatment with Polypodium leucotomos, vitamin D, C and E was initiated.
- On day 68, there was a significant improvement with no itchiness.
- 3 months after symptom onset, itching and erythema had almost disappeared. Remaining hyperpigmentation of the skin was observed.
  - Naranjo’s algorithm → determined a probable relationship (score 5) and reintroduction of vandetanib was discouraged.

**CONCLUSION AND RELEVANCE**

Hospital pharmacist determined a probable relationship between vandetanib and severe phototoxicity reaction in a patient with MMTC. The role of hospital pharmacists is essential in pharmacovigilance and in informing patients about possible adverse events of drugs.