



ADVERSE DRUG REACTIONS, INCLUDING SJS, TEN

## **PYODERMA GANGRENOSUM UNDER EGFR TYROSIN KINASE INHIBITOR TREATMENT IN A PATIENT WITH NON-SMALL CELL LUNG CANCER-CASE REPORT**

*M Kiss<sup>(1)</sup> - V Bălănuță<sup>(1)</sup> - R Cosgarea<sup>(2)</sup>*

*Clinical County Hospital, Dermatovenereology, Tirgu Mures, Romania<sup>(1)</sup> - Emergency  
Clinical County Hospital, Dermatovenereology, Cluj Napoca, Romania<sup>(2)</sup>*

**Background:** Oral epidermal growth factor(EGFR) tyrosine kinase inhibitors represent a targeted therapy in patients with advanced non-small cell lung cancer(NSCLC), with common cutaneous side effects reported, ranging from mild conditions such as acneiform rash, xeroderma, paronychia, to severe skin toxicity in the form of skin ulcerations, vasculitis, purpura.

**Case report:** We report the case of a 78-years old female patient, diagnosed with stage IV non-small-cell-lung cancer(NSCLC), type 2 diabetes, stage III chronic renal insufficiency and obesity, who developed multiple ulcerated, partially necrotic papules in the submammary and inguinal region, 3 months after initiating treatment with EGFR tyrosine kinase inhibitor erlotinib for her lung cancer. The lesions were painful, with undermined dark red border and quickly spreading evolution. Serum complement levels and crioglobulins, pANCA, cANCA, ANA and direct immunofluorescence from perilesional skin biopsy excluded the diagnosis of cutaneous vasculitis. Histopathology evidenced an ulcerated epidermis with dense lymphocytic and neutrophilic infiltration, endothelial swelling and microhaemorrhages, along with reactive endothelial vessels in the dermis.

Based on these investigations, we established the diagnosis of pyoderma gangrenosum secondary to oral EGFR tyrosine kinase inhibitor therapy.

**Observations:** We reviewed and found no similar case-reports in the literature. We initiated corticotherapy, along with local wound management. Dose adjustment of erlotinib was also recommended.

**Key message:** EGFR tyrosin kinase inhibitors represent a standard care therapy in advanced stage NSCLC, but with very common cutaneous side-effects, making regular examinations of the skin necessary.

**Key words:** Pyoderma gangrenosum, erlotinib, cutaneous side effects, EGFR tyrosin kinase inhibitor

