Paraneoplastic Acquired Ichthyosis in Lung Cancer☆

Ictiosis adquirida paraneoplásica en adenocarcinoma de pulmón

Dear Editor,

Ichthyosis is a skin disease characterized by disordered keratinization of the corneal layer. Its clinical manifestation consists of the appearance of scales distributed widely over the surface of the skin.[1–4] Acquired ichthyosis (AI) is a very uncommon entity,[2] occurring in adults, generally in association with underlying disease.

We report the case of a 51-year-old man, smoker, with type 2 diabetes, who was admitted due to acute lower back pain, and asthenia and anorexia. The patient was cachexic and presented hyperpigmented hyperkeratotic lesions on the skin, more obviously on both legs, but not on the face, palms of hands and soles of feet, axillae, cubital and popliteal fossae. The patient reported that the lesions had appeared 3–4 months before admission (Fig. 1). Bilateral pulmonary nodules were detected on chest X-ray. The study was completed with a computed tomography of the chest and abdomen, results of which were consistent with the radiological diagnosis of primary lung cancer with hepatic, lymph node, adrenal and bone metastases (T4, N3, M1b). Biopsy of a pulmonary nodule provided histological confirmation of lung adenocarcinoma.

On histology, ichthyosis is characterized by hyperkeratosis, with a very thin, or absent, granular layer, normal stratum spinosum, and absence of inflammatory infiltrates in the dermis and epidermis.[1–4]

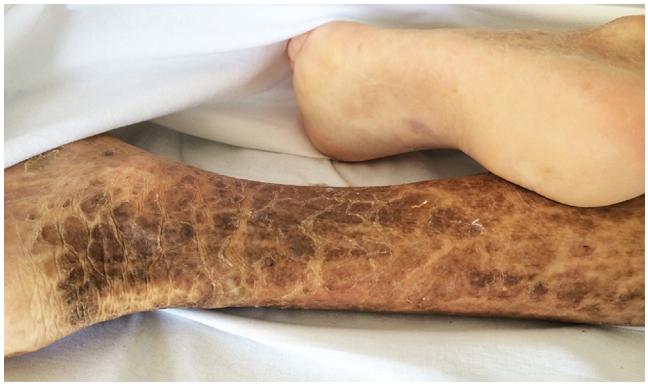

Fig. 1. Photograph of the posteromedial aspect of the patient's right leg. Typical ichthyosis lesions are observed: dry, rough skin, with hyperpigmented, brownish scales, with polygonal, free, irregular margins.

Clinically, it presents as dry, rough skin, with symmetric appearance of hyperpigmented scales of greyish-brown tones, between 1 mm and 1 cm in diameter, with polygonal, free, irregular margins. Extensor regions of the lower limbs are generally more intensely involved, but the face and areas of flexion, such as the cubital and popliteal fossae, the neck and the axillae, are lesion-free.[1,2] There is greater predisposition to suffering cutaneous infections due to deterioration of the physiological barrier function of the skin.[1]

When ichthyosis is detected in the adult, underlying systemic disease must be ruled out. The intensity of the symptoms is often associated with the progress of underlying disease, and lesions tend to resolve when this is improved or cured. Diagnosis of AI may appear as a forerunner or a preliminary sign of systemic disease.[1,2]

With regard to malignant disease, AI has been associated most frequently with Hodgkin lymphoma. Other cancers that have been related with AI include non-Hodgkin lymphoma, Kaposi's sarcoma, multiple myeloma, leiomyosarcoma and breast, ovarian, cervical and lung cancer. We found only 1 published case of AI associated with lung cancer, with onset after starting chemotherapy.[5] Cases of AI secondary to autoimmune or systemic inflammatory diseases, endocrine/metabolic disorders, HIV infection and after the use of certain medications have been described.[1–3]

In conclusion, in a patient with AI, the existence of an underlying cause should be investigated, and the differential diagnoses may be guided by the spectrum of diseases mentioned above, with particular emphasis on the presence of hidden malignancy, due to its serious nature.

References

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