A 53-year-old man presented with a 3-day history of bilateral pain in the lower extremities. He also had a 3-month history of thickening and desquamation of skin, with associated itching, and a 5-lb (2.27-kg) weight loss. The skin changes initially appeared on the hands and subsequently became generalized.

The patient denied fever, cough, chest pain, dyspnea on exertion, joint pain, and mucosal or genital ulcers or discharge. He had a 40-pack-year history of cigarette smoking. He did not have any significant previous medical or dermatologic problems and was not taking any medications.

The patient had generalized hyperkeratotic, scaling, and desquamating lesions affecting the palms, soles, scalp, and ear helices (Figure 1). The lesions were nontender, confluent, and poorly defined plaques against an erythematous background. His palms and soles had hyperkeratosis with accentuation of normal dermatoglyphics (Figure 2). The superficial layers of skin did not slip free from the lower layers with rubbing pressure (negative Nikolsky sign).

The patient did not have pitting of nails or mucosal lesions. The examination also revealed bilateral, nontender cervical, axillary, and inguinal lymphadenopathy (1 to 2 cm in diameter). Pulmonary, cardiovascular, abdominal, and joint examinations did not reveal any abnormalities.

The patient had hypoalbuminemia (albumin level of 2.5 g/dL), anemia (hemoglobin level of 11.4 g/dL), and an elevated eosinophil count (10%, with absolute eosinophil count of 900 \( \times 10^6 \)/L). The erythrocyte sedimentation rate was 78 mm/h. The results of serologic tests for HIV, hepatitis B and C viruses, *Treponema pallidum*, *Neisseria gonorrhoeae*, and *Chlamydia* were negative.

Chest radiographs showed a 7.5 3 5.2 3 8.2-cm lung mass in the right lower lobe (Figure 3), which was confirmed by a CT scan (Figure 4). Skin biopsy revealed psoriasiform hyperplasia of the epidermis with neutrophilic microabscesses in the stratum corneum (Figure 5). The dermis had perivascular lymphocytes and eosinophils. Bronchoscopy was performed (Figure 6). Bronchoscopic endobronchial biopsy of the patient's lung mass revealed a poorly differentiated squamous cell carcinoma.

**Discussion**

Exfoliative dermatitis (erythroderma) is a common and serious dermatologic problem. It is characterized by an intense, widespread erythema and variable scaling, with warm and edematous skin. Exfoliative dermatitis can be idiopathic or secondary to psoriasis, pityriasis rubra pilaris, atopy, or drug reactions. Up to 20% of patients may have an unrecognized cause for erythroderma at initial presentation. Exfoliative dermatitis may be associated with an underlying malignancy in 8% to 24% of patients.\(^1\)\(^-\)\(^5\) The most common malignancy in this setting is cutaneous T-cell lymphoma. Case reports of erythroderma as a presenting feature of a solid tumor of the lungs, liver, prostate, colon, and thyroid have been described.\(^1\)\(^-\)\(^5\)

The pathophysiology of this manifestation is not known. Other cutaneous paraneoplastic syndromes associated with lung cancer include acanthosis palmaris, dermatomyositis, erythema gyratum repens, migratory thrombophlebitis (Trousseau sign), paraneoplastic acrokeratosis (Bazex syndrome), hypertrophic pulmonary osteoarthropathy, and exfoliative dermatitis.\(^6\)

Our patient had profound palmar and plantar hyperkeratosis with accentuation of normal dermatoglyphics ("tripe palms"). Such hyperkeratosis has been linked to visceral cancers, such as...
lung cancer. The skin biopsy specimen showed psoriasiform hyperplasia of the epidermis with neutrophilic microabscesses in the stratum corneum. There were perivascular lymphocytes and eosinophils in the dermis. The clinicohistologic correlation in erythroderma is usually poor because the specific cutaneous changes of a dermatosis may be obscured by the nonspecific change induced by erythroderma.

This patient had dermatitis for 3 months without other signs and symptoms of underlying disease. This case highlights the important clinical features of exfoliative dermatitis and emphasizes that dermatoses with unclear etiologies warrant thorough evaluation with an age-appropriate workup for malignancies. A high index of suspicion for malignancy in patients with dermatoses of unclear etiologies may result in early diagnosis and appropriate treatment.

**References:** REFERENCES


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