Two cases are reported illustrating a parallel course of extensive skin manifestations and lung cancer. The cases presented features of paraneoplastic acrokeratosis (Bazex’s syndrome) and erythema gyratum repens though they did not completely correspond to these well-defined conditions. In both cases the cutaneous eruption appeared more than a year prior to the diagnosis of lung cancer, and the skin disease resolved completely within half a year following surgical removal of the cancer. The need is stressed for repeated cancer screens when a cutaneous marker of internal malignancy is suspected. Key words: Bazex’s syndrome; erythema gyratum repens; paraneoplastic syndrome; skin marker.

(Accepted January 19, 2000.)


Hans Lomholt, Department of Dermatology and Venerology, University of Aarhus, Marselisborg Hospital, P. P. Ørumsgade 11, DK-8000, Aarhus C, Denmark

It is important to recognize paraneoplastic skin manifestations as they can provide an opportunity for early diagnosis and treatment. Furthermore, surgical removal of the cancer is often the only effective treatment of the cutaneous eruption. Curth (1) has provided a number of criteria to be fulfilled in order to accept a certain cutaneous manifestation as associated with internal malignancy. Important among these is a parallel course of the skin symptoms and the cancer. The following 2 cases illustrate such a parallel course. Accordingly, in both cases skin eruptions resistant to therapy appeared more than a year prior to the diagnosis of lung cancer. The eruptions resolved completely following surgical removal of the cancer.

CASE REPORTS

Patient 1

A previously healthy 53-year-old male smoker, without predisposition for psoriasis, was referred by the local dermatologist under the diagnosis of dyshidrotic eczema. He presented with a two-and-a-half-year history of palmar and plantar eczema. The eczema had been treated with local steroids, antibiotics and oral prednisone resulting in clearing for only short periods of time. On the first examination there was marked hyperkeratosis of the palms and soles (Fig. 1) and 3 to 4 nummulate elements on the back. Nail involvement was not noticed.

Initially, the condition improved on treatment with neotigason. However, after 6 weeks there was a widespread appearance of moderately infiltrated, annular and gyrate elements with a slight scaling (Fig. 2). Several skin biopsies from arm and back showed unspecific lymphocytic infiltration; fungal scrapings were negative. There was a clinical suspicion of an underlying cancer, but blood biochemistry and X-ray of the chest were normal.

Treatment was initiated with oral prednisone, 30 mg a day tapered over 6 weeks, resulting in good clinical improvement of truncal lesions and hyperkeratosis on palms and soles. However, shortly after, the skin disease relapsed. In addition to previous findings there was now a thick scaling on the vertex and the helix of the left ear, and fingernails showed onycholysis. Biopsies from arm and hand showed unspecific lymphocytic infiltration and psoriasiform dermatitis, respectively. Chest X-ray was normal.

During the following 2 months the patient was hospitalized twice for tar treatment and a third chest X-ray was normal. Finally, after another 6 months, the patient was hospitalized with generalized erythroderma and hyperkeratosis of the hands and feet. Chest X-ray was normal.

Succeeding the diagnosis of cancer, the left lung was removed, harbouring an adenocarcinoma with spreading to the lymphatics. Three months following the operation the skin symptoms had completely disappeared and no lesions had reappeared at 6 months follow-up.
DISCUSSION

A number of well-defined cutaneous signs and symptoms have been reported as markers of lung cancer including acanthosis palmaris (tripe palms), dermatomyositis, erythema gyratum repens, paraneoplastic acrokeratosis (Bazex’s syndrome), bullous exanthema, migratory thrombophlebitis (Trousseau’s sign), punctate keratoses of hands and feet, hypertrophic pulmonal osteoarthropathia and clubbing (2, 3). The cutaneous eruptions of the 2 patients reported here did not correspond exactly to any of these conditions. However, they presented elements of several of these.

Patient 1 showed a number of similarities with paraneoplastic acrokeratosis (4). Accordingly, this disease almost exclusively affects males older than 40 years and it typically presents with erythema and psoriasiform scaling on fingers and toes in the form of keratoderma. In addition, the helices of the ears are frequently affected. Nails may show subungual hyperkeratoses and onycholysis. Over time, the eruption spreads to involve the truncus and extremities with psoriasis-like lesions, though the plaques may be less well defined. When associated with lung cancer, the tumour is typically located in the upper third of the lungs (4). In contrast to patient 1, erythrodema is not a part of paraneoplastic acrokeratosis and the associated tumour is most often a plano-cellular carcinoma and rarely an adenocarcinoma (4). Also the back of the nose is often involved, and diffuse palmar and plantar hyperkeratoses alone is not typical, as the lesions are situated distally with involvement of the upper side of the distant phalanges.

Both patients showed an exfoliative erythroderma which is known to be associated with malignant disease in 10–15% of cases. Most often the associated disease is a malignant affection of the lymphoreticular system, but solid tumours have also been reported (5).

Patient 1 showed profound palmar and plantar hyperkeratosis during the full course of the disease. Such hyperkeratosis have, by some authors, been linked to internal cancer including lung cancer. This is especially true for the so-called “tripe palms” presenting a curious accentuation of normal dermatoglyphics (6), and also for certain kinds of familiar punctate keratoderma (5). The potential association of more diffuse palmar and plantar hyperkeratosis and malignancy is less well documented.

In both cases a figurate erythema evolved resembling erythema gyratum repens. This is an uncommon but highly characteristic dermatosis presenting with the appearance of rings or gyrate bands of erythema inside already existent patterns. “Gyratum repens” means creeping rings and the lesions enlarge centrifugally at 0.2–0.5 cm a day (7). The inner border of the figurate lesions may be scally and commonly the condition is accompanied by severe itching. Only about 50 cases have been reported in the literature and most of these have been associated with a solid cancer located in the lungs (8, 9).

In our patients, the suspicion of an underlying cancer was awoken early in the course of disease. However, it took several screenings before the malignancy was recognized by X-ray examination of the chest. There was no clinical signs other than the skin disease. Though the skin eruptions did not exactly correspond to any previously well-defined condition, the parallel course with the lung cancer strongly supports...
them as paraneoplastic eruptions. This stresses the need to be aware also of less characteristic paraneoplastic skin manifestations and to perform repeated cancer screens based on the suspicion. Maybe a more aggressive attitude, including thorax CT-scan and bronchoscopy, would have been of benefit.

REFERENCES