

CASES FOR DIAGNOSIS

Symmetric Palmar Hyperkeratosis and Esophageal Carcinoma

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Patient History

The patient was a 69-year-old woman with a history of chronic obstructive pulmonary disease, atrial fibrillation, and cognitive impairment, who was admitted to hospital due to decompensated heart failure. Consultation was for the presence of symmetric hyperkeratosis on both palms. Time since onset was unknown.

Physical Examination

The most notable finding of the skin examination was marked accentuation of the grooves and ridges of the palms, which were more marked on the finger pads and thenar and hypothenar eminences (Figures 1 and 2). There were no signs of acanthosis nigricans or other cutaneous abnormalities.

Histopathology

Histopathology of the skin on the palm revealed an undulated epidermis with orthokeratotic hyperkeratosis, acanthosis, and papillomatosis (Figure 3). No significant abnormalities were observed in the dermis.

Additional Tests

Routine blood tests revealed a hemoglobin concentration of 11 g/dL, hematocrit of 36%, and an erythrocyte sedimentation rate of 40 mm/h. Analysis of tumor markers revealed the following: carcinoembryonic antigen, 142 ng/mL (normal range, <5.0 ng/mL); cancer antigen 19.9, 18 400 U/mL (normal range, <37 U/mL); and cancer antigen 125, 115 U/mL (normal range, <35 U/mL).

Esophagogastroscopy revealed a mass blocking the lower third of the esophagus. Histology of the lesion confirmed squamous cell carcinoma. In addition, computed tomography of the abdomen and thorax revealed enlarged lymph nodes in the subcarinal space and azygoesophageal recess (Figure 4).

What is your diagnosis?

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Figure 1.



Figure 2.

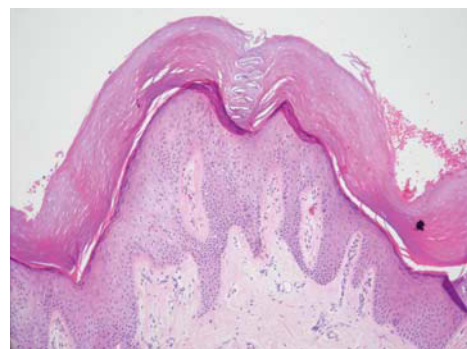


Figure 3.
Hematoxylin-eosin, $\times 10$.

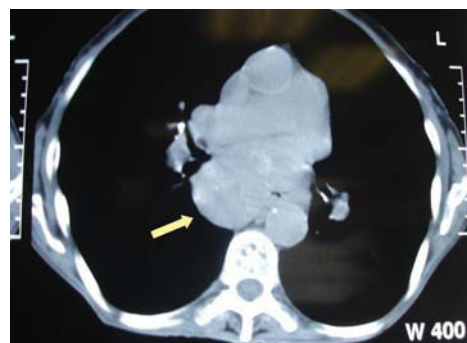


Figure 4.

Diagnosis

Acanthosis palmaris associated with esophageal carcinoma.

Course

The patient's condition deteriorated rapidly and progressively, and she died a few weeks after admission.

Comment

Acanthosis palmaris is an uncommon paraneoplastic dermatosis characterized by accentuation of the grooves and ridges of the palm that gives the skin a rough and velvety appearance. In the English-language medical literature, it is referred to as pachydermatoglyphy or tripe palm.^{1,2}

It has mainly been reported in adults owing to its marked paraneoplastic character, although a case of nonparaneoplastic acanthosis palmaris has recently been reported in a child with acanthosis nigricans.³ In more than 90% of cases, it is associated with an internal neoplasm,¹ especially digestive or pulmonary tumors, or less frequently, tumors of the genitourinary tract or head and neck.^{4,5} The most frequently implicated tumor of the digestive system is gastric carcinoma, although there have also been reports of cancer of the colon and pancreas.⁴

Acanthosis palmaris may present in isolation or, more commonly, in association with other paraneoplastic manifestations, mainly acanthosis nigricans, although it has also been reported in association with Leser-Trélat syndrome, florid cutaneous papillomatosis, and Bazex paraneoplastic acrokeratosis.

When it appears as an isolated paraneoplastic manifestation, the most frequent underlying tumor is lung carcinoma, and when it is associated with acanthosis nigricans, gastric carcinoma is the most common.

Acanthosis palmaris can appear at any time during the course of the internal neoplasm, although it appears

before diagnosis (mean of 2 months) in more than 40% of cases.

Histologically, the epidermis is characteristically wavy, which accounts for the pachydermatoglyphy, and we can observe acanthosis and papillomatosis. It is generally not accompanied by significant changes in the dermis, although mucin deposits or increased presence of mast cells can sometimes be observed.

Its pathogenesis is unknown, although certain growth factors (including transforming growth factor α) secreted by the tumor itself are thought to be responsible for the epidermal hyperplasia.⁶

To conclude, we present this new case of tripe palm as an uncommon paraneoplastic manifestation of esophageal carcinoma. Given the high positive predictive value of this dermatosis, it must be recognized and diagnosed, since it is often the first sign of the tumor.

Conflicts of Interest

The authors declare no conflicts of interest.

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