

Leser-Trélat Sign: A Paraneoplastic Process?

To the Editor:

Leser-Trélat sign is a rare skin condition characterized by the sudden appearance of seborrheic keratoses that rapidly increase in number and size within weeks to months. Co-occurrence has been reported with a large number of malignancies, particularly adenocarcinoma and lymphoma. We present a case of Leser-Trélat sign that was not associated with an underlying malignancy.

A 44-year-old man was admitted to our dermatology outpatient department with a serpigo on the neck that had grown rapidly in the last month. His medical history and family history were unremarkable. Dermatologic examination revealed numerous 3- to 4-mm brown and slightly verrucous papules on the neck (Figure 1). A punch biopsy of the lesion showed acanthosis of predominantly basaloid cells, papillomatosis, and hyperkeratosis, as well as the presence of characteristic horn cysts (Figure 2). He was tested for possible underlying internal malignancy. Liver and kidney function tests, electrolyte count, protein electrophoresis, and whole blood and urine tests were within reference range. Chest radiography and abdominal ultrasonography revealed no signs of pathology. The erythrocyte sedimentation rate was 20 mm/h (reference range, 0–20 mm/h) and tests for hepatitis, human immunodeficiency virus, and syphilis were negative. Abdominal, cranial, and thorax computed tomography revealed no abnormalities. Otolaryngologic examinations also were negative. Additional endoscopic analyses, esophagogastroduodenoscopy, and colonoscopy revealed no abnormalities. At 1-year follow-up, the seborrheic keratoses remained unchanged. He has remained in good health without specific signs or symptoms suggestive of an underlying malignancy.

Paraneoplastic syndromes are associated with malignancy but progress without connection to a primary tumor or metastasis and form a group of clinical manifestations. The characteristic progress of paraneoplastic syndromes shows parallelism with the progression of the tumor. The mechanism underlying the development is not known, though the actions of bioactive substances that cause responses in the tumor, such as polypeptide hormones, hormonelike peptides, antibodies or immune complexes, and cytokines or growth factors, have been implicated.¹



Figure 1. Sudden onset of multiple seborrheic keratoses on the neck.

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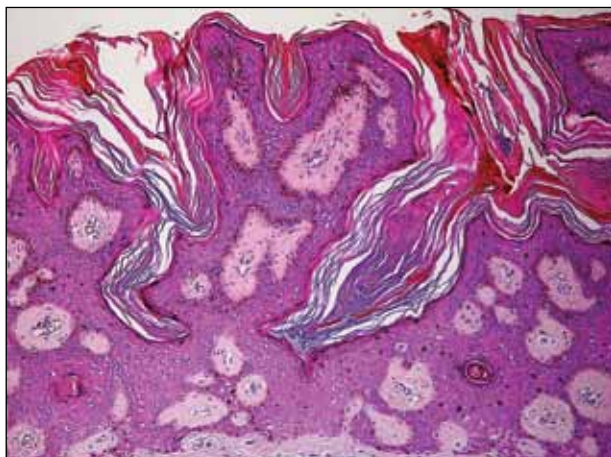


Figure 2. Marked acanthosis of predominantly basaloid cells, papillomatosis, and hyperkeratosis, as well as characteristic horn cysts (H&E, original magnification $\times 40$).

Although the term *paraneoplastic syndrome* commonly is used for Leser-Trélat sign, we do not believe it is accurate. As Fink et al² and Schwengle et al³ indicated, the possibility of the co-occurrence being fortuitous is high. Showing a parallel progress of malignancy with paraneoplastic dermatosis requires that the paraneoplastic syndrome also diminish when the tumor is cured.⁴ It should then reappear with cancer recurrence or metastasis, which has not been exhibited in many case presentations in the literature.³ Disease regression was observed in only 1 of 3 seborrheic keratosis cases after primary cancer treatment.⁵

In patients with a malignancy, the sudden increase in seborrheic keratosis is based exclusively on the subjective evaluation of the patient, which may not be reliable. Schwengle et al³ stated that this sudden increase can be related to the awareness

level of the patient who had a cancer diagnosis. Bräuer et al⁶ stated that no plausible definition distinguishes eruptive versus common seborrheic keratoses.

As a result, the results regarding the relationship between malignancy and Leser-Trélat sign are conflicting, and no strong evidence supports the presence of the sign. Only case reports have suggested that Leser-Trélat sign accompanies malignancy. Studies investigating its etiopathogenesis have not revealed a substance that has been released from or as a response to a tumor.

We believe that the presence of eruptive seborrheic keratosis does not necessitate screening for underlying internal malignancies.

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REFERENCES

1. Cohen PR. Paraneoplastic dermatopathology: cutaneous paraneoplastic syndromes. *Adv Dermatol*. 1996;11:215-252.
2. Fink AM, Filz D, Krajnik G, et al. Seborrheic keratoses in patients with internal malignancies: a case-control study with a prospective accrual of patients. *J Eur Acad Dermatol Venereol*. 2009;23:1316-1319.
3. Schwengle LE, Rampen FH, Wobbles T. Seborrheic keratoses and internal malignancies. a case control study. *Clin Exp Dermatol*. 1988;13:177-179.
4. Curth HO. Skin lesions and internal carcinoma. In: Andrade S, Gumport S, Popkin GL, et al, eds. *Cancer of the Skin: Biology, Diagnosis, and Management*. Vol 2. Philadelphia, PA: WB Saunders; 1976:1308-1341.
5. Heaphy MR Jr, Millns JL, Schroeter AL. The sign of Leser-Trélat in a case of adenocarcinoma of the lung. *J Am Acad Dermatol*. 2000;43(2, pt 2):386-390.
6. Bräuer J, Happle R, Gieler U. The sign of Leser-Trélat: fact or myth? *J Eur Acad Dermatol Venereol*. 1992;1:77-80.