## Urticaria Associated With a Small Cell Carcinoma of the Lung

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Urticaria has been observed occasionally in association with lymphoproliferative disorders. We report the case of a 56-year-old man with acute urticaria associated with a small cell carcinoma of the lung. Following surgical treatment, the patient remained free of the urticaria.

everal dermatoses have been associated with malignancies and, therefore, are considered paraneoplastic. Urticaria and angioedema are among the dermatoses most frequently associated with paraneoplastic lymphoproliferative disorders. We report on a patient exhibiting urticaria in association with a carcinoma of the lung.

## **Case Report**

A 56-year-old man presented with a 5-day history of acute urticaria and angioedema. Two weeks earlier, a small cell carcinoma of the lung had been diagnosed. The patient did not take any medication when the urticaria began. The findings from the physical examination revealed a severely reduced health status, with cachexia and large confluent, generalized urticaria (Figure), along with an angioedema of the upper lip. There were no signs of infection. Results of a comprehensive laboratory workup (including blood counts, liver enzymes, kidney function, electrolytes, aspartate aminotransferase, antistreptolysin, antideoxyribonuclease B,  $T_3$ ,  $T_4$ , thyrotropin, and antinuclear antibodies) did not show any abnormalities, with the exception of an elevated C-reactive protein (20 mg/dL), presumably caused by the underlying small cell carcinoma of the lung.

Despite an intravenous application of 250 mg of prednisolone and subsequent therapy with antihistamines, the patient continued to develop urticae. Only after high-dose methylprednisolone was administered orally—together with a combination

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Generalized urticaria in a cachectic patient with small cell carcinoma of the lung.

of antihistamines—over a period of 10 days, did the urticaria fade. Following surgery for the carcinoma of the lung, the patient stayed free of the urticaria.

## Comment

Urticaria only rarely has been associated with malignancies in general and carcinoma of the lung in particular.<sup>2-5</sup> We feel that in this case, the small cell carcinoma of the lung is the most likely trigger

factor as other causes could not be detected. In particular, all medications were discontinued 4 days before the onset of the urticaria, excluding induction by drugs. Contrary to the patients described by Lindelöf and Wahlgren,<sup>2</sup> we did not observe continuation of urticarial rashes following surgery. Hypothetically, the further course of the urticaria might depend on the degree of reduction of the tumor mass achievable by the surgical procedure, which could have an influence of tumor-associated peptides. Consequently, the peptides may serve as trigger factors for urticaria associated with a tumor.

This report underlines the possibility of urticaria occurring in a paraneoplastic situation. Therefore, the respective diagnostic strategy also should comprise a screening for malignancies in patients clinically suspect of suffering from a severe disease.

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