

gested extensive MF, even though the short duration of the rash told in favour of a systemic reticulosis. The proportion of T cells in the skin indicated that she had a T cell reticulosis, probably MF (3), although the histological appearances varied on different occasions, between MF and reticulum cell sarcoma. In the absence of a post-mortem examination, systemic involvement with reticulosis could not be excluded.

The patient died within 8 months of the onset of ischaemia and Hawley et al. (4) observed that digital ischaemia, when it develops, may anticipate a terminal course in a patient with malignant disease.

ACKNOWLEDGEMENTS

I wish to thank Dr F. A. Ive for permission to report the case and Professor S. Shuster for helpful advice.

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Does the Cancer Accompanying Acanthosis Nigricans Contain Endocrine Cells of the APUD Series?

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Received November 6, 1978

Abstract. Following the publication of Hage & Hage, who believe that gastric cancers accompanying malignant



Fig. 1. Papillary, verrucous lesions on the left hand of Hage & Hage's patient with malignant acanthosis nigricans.

acanthosis nigricans might constitute a specific group of carcinomas in which cells from parts of the tumor arise from the APUD-series of endocrine cells, carcinomas of 2 patients with malignant acanthosis nigricans were subjected to investigation. There were no APUD-cells in the adenocarcinomas studied but they were present in the overlying mucosa. It is known, moreover, that internal carcinomas not accompanying malignant acanthosis nigricans may contain APUD cells.

In 1943 it was determined (1) that the internal carcinoma accompanying malignant acanthosis nigricans is an adenocarcinoma. Ackerman & Lantis (2) observed a black woman suffering from acanthosis nigricans associated with Hodgkin's disease. No autopsy was performed, so the presence

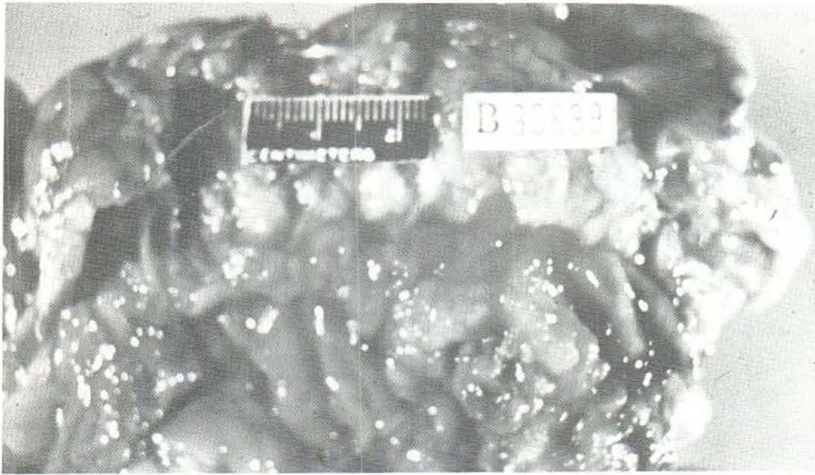


Fig. 2. Adenocarcinoma of sigmoid colon.

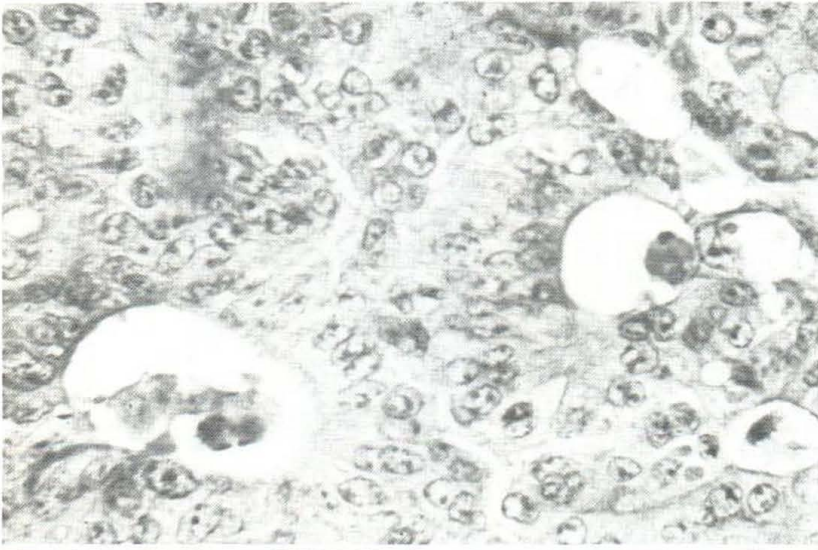


Fig. 3. Histology of adenocarcinoma of sigmoid colon.

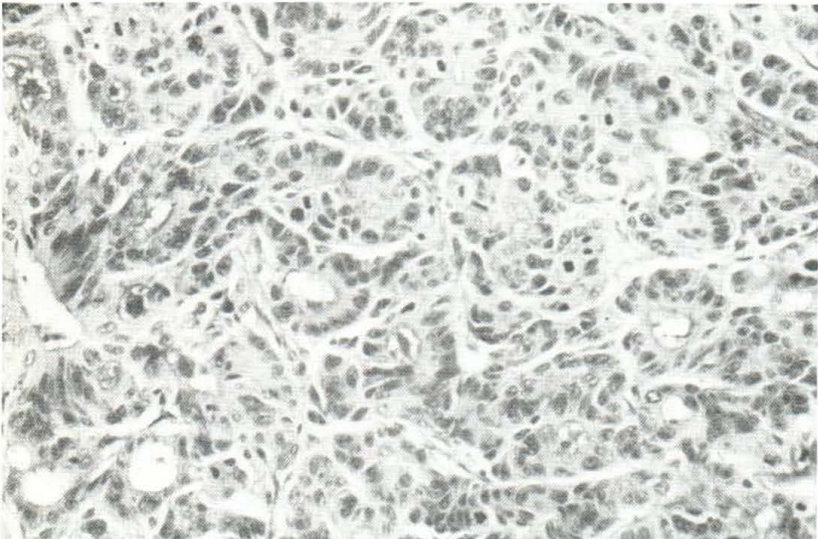


Fig. 4. Gastric cancer associated with malignant acanthosis nigricans.

of an adenocarcinoma was not ruled out. The question arises whether the adenocarcinomas accompanying malignant acanthosis nigricans are in any way different from adenocarcinomas without malignant acanthosis nigricans. It was, therefore, with great interest that Hage & Hage's (3) findings of APUD (Amino Precursor-Uptake and Decarboxylation) cells in a gastric cancer of a patient with malignant acanthosis nigricans were received.

Hage & Hage (3) described a woman with widespread acanthosis nigricans (Fig. 1) and a gastric cancer of the diffuse and infiltrating type. Many tumor cells were identified by means of histochemistry and electronmicroscopy as neoplastic enterochromaffin-like cells. The authors suggested that cancers associated with malignant acanthosis nigricans might constitute a specific group of adenocarcinomas in which cells from parts of the tumor arise from the APUD-series of endocrine cells.

Therefore, the adenocarcinomas of 2 of my patients with malignant acanthosis nigricans were subjected to a search for cells of the APUD-series.¹

1) I. E., an 84-year-old Negro (4), had malignant acanthosis nigricans. When the dermatosis was discovered, a search for the tumor was undertaken. A carcinoma of the sigmoid colon (Figs. 2 and 3) was found and surgically removed before it caused any symptoms. The dermatosis cleared up immediately and he lived another 8 years. He died at the age of 92 years from congestive heart failure.

2) A. B., a 60-year-old black woman, had widespread acanthosis nigricans. At Presbyterian Hospital in New York an annular gastric cancer (Fig. 4) was visualized and gastrectomy was performed. There were metastases to many lymph nodes. After the operation the dermatosis remained unchanged. The patient died 9 months following gastrectomy.

New sections of these two tumors were stained with the methods of Fontana and the methods of Grimelius. They highlight, respectively, argentaffin granules and argyrophilic granules, that is, those intracellular, neurosecretory, granules which are associated with cells of the APUD system. The results of these stains were entirely negative in the adenocarcinomas, while they were positive in the overlying mucosa, which served as a built-in control, since APUD cells are normally found in these tissues.

It therefore seems that Hage & Hage's findings of APUD cells in adenocarcinomas accompanying

malignant acanthosis nigricans are not characteristic of tumors associated with malignant acanthosis nigricans, but rather a chance occurrence. Moreover, adenocarcinomas of the gastro-intestinal tract without accompanying malignant acanthosis nigricans may contain smaller or greater numbers of cells with argentaffin and/or argyrophilic granules (5) and some small cell "undifferentiated" colonic cancers derive from APUD elements (6).

It would seem advisable to examine additional cancers accompanying malignant acanthosis nigricans for APUD cells to evaluate further the findings of Hage & Hage.

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Solitary Lichen Planus Simulating Malignant Lesions

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Received November 9, 1978

Abstract. Four patients with similar cutaneous lesions clinically simulating Bowen's disease or basal cell carcinoma revealed histopathological changes of lichen

¹ I am very grateful to Dr Raffaele Lattes, who supervised the examinations.