Acute Primary Cutaneous Cryptococcosis

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A case of primary cutaneous cryptococcosis showing an acute, highly progressive course is reported. The patient, a man aged 45, was severely ill with high fever. The skin lesions, found mainly on the trunk, consisted of rapidly increasing deep ulcers with flat, undermined borders ultimately leading to extensive tissue defects. The cutaneous infection had started on the left shoulder in consequence of a blunt trauma. Four weeks after admission irreversible shock occurred during administration of an infusion of amphotericin B and the patient died. The postmortem examination revealed no significant changes and in particular no lesions caused by crypt-tococcis were found. There was marked atrophy of the adrenal glands.

Cryptococcus neoformans was obtained in pure culture a. o. from a closed lesion. In scrapings from the ulcers, numerous yeasts could be demonstrated, part of which were phagocytized by leucocytes. As a special form of phagocytosis, peculiar rosette formations of leucocytes were seen, each with a yeast cell in the centre of the rosette. Incidentally, also yeast cells with germinal tubes – usually reported as absent in tissue or exudate – were observed. At histological examination the yeasts occurred in large numbers well into the depth of the skin, for the most part budding and sometimes forming short chains. In demonstrating the organisms in tissue sections the Alcian blue stain, the Hale technique and a combination of Alcian blue and PAS staining were used besides more conventional methods (Gram's stain and the PAS technique). The isolated strain was found pathogenic to white mice and some findings in experimental cryptococcosis are also mentioned.

(Will be extensively published together with M. Ruiter in Dermatologica)