

## BASAL CELL CARCINOMA IN ASSOCIATION WITH ACRODERMATITIS CHRONICA ATROPHICANS HERXHEIMER

B. Lagerholm, L. Molin and L. Gip

*From the Department of Dermatology, Karolinska sjukhuset, Stockholm, Sweden*

**Abstract.** A case of basal-cell carcinoma developed in the skin lesion of acrodermatitis chronica atrophicans Herxheimer is reported. Both diagnoses were histologically verified.

The etiology of Acrodermatitis chronica atrophicans Herxheimer (Dermatrophia chronica idiopathica progressiva) is amphibological. Clinically the disease is a chronic progressive form of dermatitis primarily involving the extremities and rarely generalized. The morphology is mostly characterized by red-bluish often atrophic puckered skin reflecting atrophy of the epidermis and dermis thus partly visualizing the blood vessels. The condition is infrequently associated with fibrous nodules (15), pseudosclerodermatous plaques and ulcers (15). Involvement of other organs has been reported (4, 5, 6, 9, 10, 14).

The histopathological changes are corroborative only if the specimen for biopsy is selected from a lesion representing a fully developed stage of the disease. Acrodermatitis chronica atrophicans Herxheimer develops dynamically (12). During the *acute phase* there is an inflammatory reaction with a varying degree of edema in the dermis with no appreciable changes in the epidermis and no clearly discernible degeneration of the elastic fibers. The dermal appendages mostly appear normal.

A progressive developing of epidermal and dermal changes is met with in the subsequent *inflammatory phase*. There is atrophy of the basal and spinous layers and often relative or absolute hyperkeratosis. The collagenous fibers gradually undergo homogenization. A continuous decrease of elastic tissue fibers apparently concomitant with the collagenous degeneration is recognizable.

An ubiquitous disappearance of the pilosebaceous apparatuses is a corroborative sign of this stage. The sweat glands might be invaded by the inflammatory cells. An infiltrate-free zone is often distinguishable just beneath the basal cell layer. No unequivocal proofs that the disease is primarily vascular have been presented. An atrophy of the subcutaneous tissue is observed.

A decrease and later disappearance of the inflammatory cells and a pronounced atrophy of the epidermis and dermis is characteristic of the *atrophic phase*.

The present paper reports on one case of acrodermatitis developing a basal cell carcinoma within the lesion.

### CASE REPORT

A 59-year-old skipper with red-bluish thin, paper like and slightly wrinkled skin in areas distributed at random on both legs. The lesions had a duration of more than four years. Within such a lesion on the ventral part of the left thigh a slightly elevated tumor gradually developed during two years. About one year after onset a conjectured scaling or crustiform appearance of the central part of the tumor developed.

A biopsy from this localization revealed a histological picture corroborative for acrodermatitis (Fig. 1). Centrally, in sections from the biopsy, a superficial basal cell carcinoma was visualized (Fig. 2). No signs of squamous cell carcinoma was observed. The tumor was excised by a surgeon.

### COMMENT

The possible relation between acrodermatitis and malignancy has been discussed by several authors. Degos (3) mentions the simultaneous occurrence of visceral cancer in 14 cases of acrodermatitis chronica atrophicans.



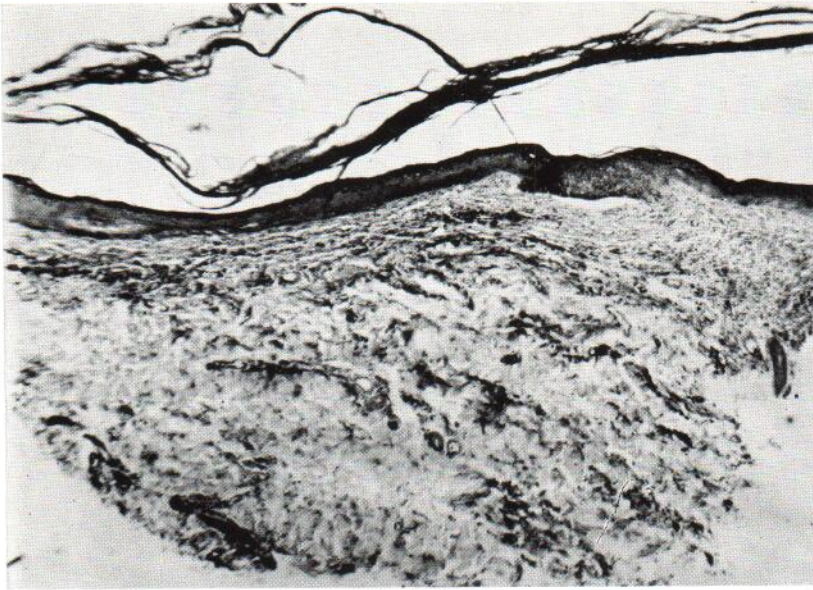


Fig. 1. Survey micrograph showing atrophy of epidermis with flattening of rete ridges, indicating border zone of normal connective tissue, lymphocytic infiltration and atrophy of dermal appendages ( $\times 25$ ).

Squamous cell carcinomas and sarcomas (1, 2, 7, 8, 11, 12, 13) in association with acrodermatitis have occasionally been described, mostly in relation to ulcers.

To our knowledge no reports on the occurrence of basal cell carcinoma within a hitherto untreated acrodermatitis lesion have been presented. The appearance of basal cell carcinomas in the transformed skin of this disease within a

region treated four years earlier for squamous cell carcinomas with X-rays has been reported (4).

It is obvious that the association of squamous cell carcinoma with acrodermatitis chronica atrophicans Herxheimer is rare but does occur.

The case presented also indicates the possible association of basal cell carcinoma with untreated acrodermatitis. The authors emphasize the feasibility of remission in this tumor.

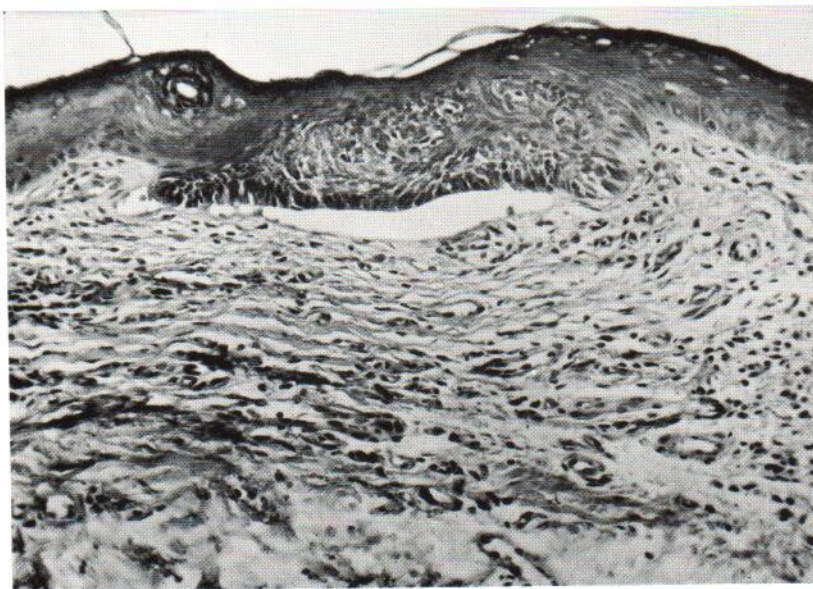


Fig. 2. Higher magnification of the central part of Fig. 1 showing superficial basal cell carcinoma ( $\times 84$ ).

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B. Lagerholm, M.D.  
 Department of Dermatology  
 Karolinska sjukhuset  
 S-104 01 Stockholm 60  
 Sweden