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LETTERS TO THE EDITOR

Hyaluronan in Basal Cell Carcinomas

Sir,

Hyaluronan (Hyaluronic acid; HYA) is a polysaccharide which is found in tissue and body fluids in varying amounts, mainly as an extracellular component of the connective tissue matrix (1). Increased deposition of HYA has been correlated with the onset of cellular migration during several stages of embryonic development and of wound healing. Increased amounts of HYA in some tumours has also been described (2). In this light, we investigated, with a specific histochemical method (3, 4), the localization of HYA in ten patients with basal cell carcinomas. Biopsies from ten healthy subjects served as controls.

In normal epidermis the highest intensity of HYA staining was found in the intercellular spaces in the middle and upper part of the spinous layer. In the basal layer the intercellular HYA was much weaker and in some specimens virtually no HYA was found around the lower part of the basal cells. No HYA was visible in the granular and corneal layers. In the papillary dermis an intense HYA staining was observed in connection with the fine collagen fibers, while less HYA was observed in the lower part of dermis (Fig. 1).

In contrast, in the dermal tissue surrounding the basal cell carcinomas an intense, and usually homogenous, HYA staining was observed. This was seen not only in the upper papillary dermis but also deep down in the reticular dermis corresponding to the stroma of the tumour, rich in fibroblasts and fine collagen bundles (Fig. 2). The epidermis overlying the tumour was usually atrophic and lacked the normal HYA pattern with a clear zone almost free from HYA in the basal cell layer.

Lately it has been demonstrated that some tumour cell types are able to synthesize large amounts of HYA themselves, while other tumours – via secreted

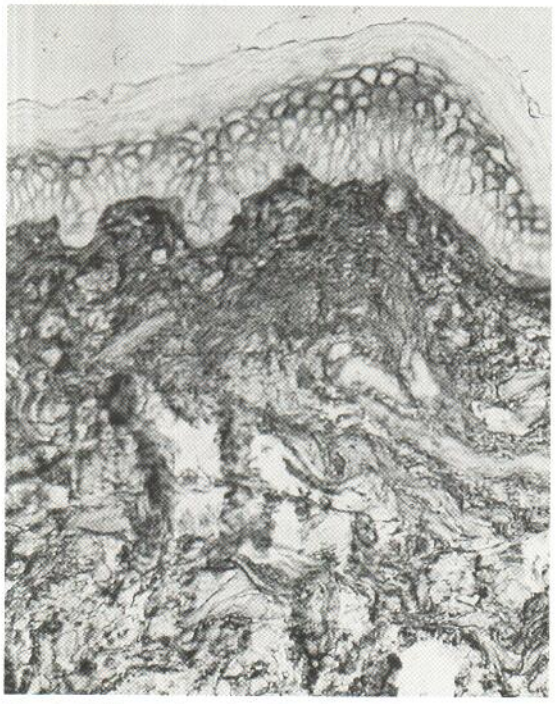

Fig. 1. HYA staining of epidermis and dermis in normal skin.

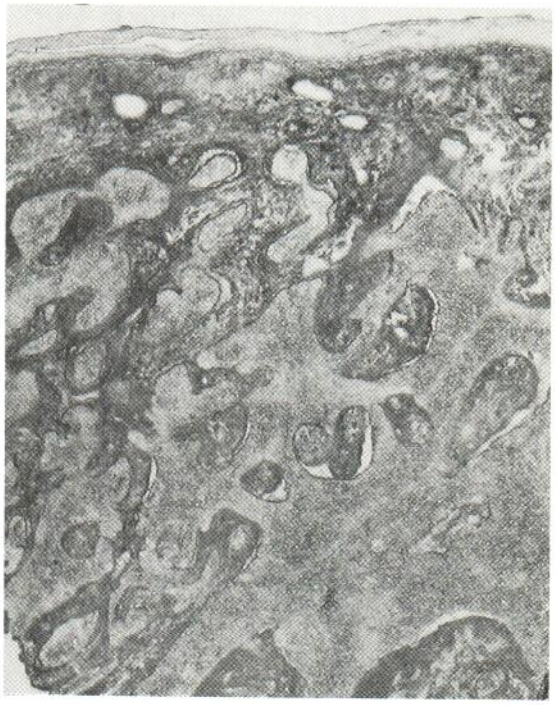

Fig. 2. Intense HYA staining in the dermal tissue surrounding the weaker stained basal cell carcinoma.

or membrane bound factors – probably are able to stimulate normal connective tissue cells to synthesize HYA (2). Which cells that are responsible for the increased HYA associated with basal cell carcinomas is still unknown. In murine melanoma the pattern of tumour associated HYA seems to be related to the invasiveness (5). The number of tumours in this preliminary study is yet too small to evaluate if the HYA pattern is related to the invasiveness. An extended study is under way to obtain more information.

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ANNOUNCEMENTS

Symposium on Epidermolysis Bullosa. Molecular Biology and Pathology of the Basement Membrane Zone will be held in Jefferson Medical College, Philadelphia, **October 4–5, 1991.** For further information please contact Eileen O'Shaughnessy, Department of Dermatology, Jefferson Medical College, 1020 Locust Street, Philadelphia, PA 19107. Tel 215-955-5785, Fax 215-955-5788.

2 International Arnold-Rikli-Symposium will be held in Atlanta, USA, **October 13–15, 1991.** Topic: Biological Effects of Light. For further information please contact Light Symposium Foundation Inc., 3000 Miller Court West, Norcross, Georgia 30071, USA. Tel 404-242-9087.

BOOKS RECEIVED

Aids and the Mouth edited by D. Grennspan, M. Schiødt, J. S. Greenspan and J. J. Pindborg, 1990. 94 colour figures, 18 figures, 52 tables, 204 pages. ISBN 87-16-10321-1. Hardcover. Price DEM 132, DDK 450, SEK 780.–. Munksgaard, Copenhagen.

This new edition of "AIDS and the mouth" is a completely new book containing much more details concerning also non-oral aspects of the HIV-problem. Large number of illustrations including tables, figures and clinical pictures have been added and this increases the pleasure of reading the book of course. The initial chapters provide a standard up to date, account of the different classifications of HIV infection/aids, epidermiology presenting Jonathan Mann's different epidemiological pattern of the spread of HIV, virology including animal models for aids, tests for HIV infection including even a brief presentation of the PCR technique, of course very short but most accurately presented. Approximately half of the book deals with oral manifestations of HIV infection, here with excellent colour photos. At the end of the book is a chapter called aids and infection control supplying excellent data how to prevent HIV transmission in healthy care settings including guides for disinfection and sterilization. One subject that could have been covered better is treatment of HIV/aids. The authors mostly deals with the treatment of oral manifestations but quite briefly even that, but then again the target group for this publication are in the first place dentists. Though I would very much recommend other people not too closely involved in the treatment of aids patients to read it because of the excellent overview which is very much up to date even though the half life for this knowledge is very short. *A. Strand, Department of Dermatology, University Hospital, Uppsala, Sweden.*