Antigen Activation of the Basement Zone after X-Ray Irradiation: Experimental Studies Concerning a Report by Furukawa et al. [1]

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We presented another case of bullous pemphigoid occurring after radiotherapy for cancer. 6 years ago, we observed 2 patients with bullous pemphigoid who developed new lesions after irradiation with radiocobalt or betatron [2].

We have studied the basement zone antibody binding of human skin biopsy specimens after X-ray irradiation using the indirect immunofluorescent method [3]. Single doses of 7,000 and 8,000 R resulted in a marked increase in basement zone antibody-binding sites. We concluded that X-ray irradiation caused an activation of bound basement zone antigens, possibly one important pathogenic factor of autoantibody induction and blister formation [details are discussed elsewhere; 4, 5].

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