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DERMATITIS ACTINICA



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**Synonyms:** X-ray burn; Roentgen ray dermatitis.

The skin changes caused by the X-rays do not become perceptible until some time after the exposure. The earliest manifestation, as a rule, is an erythema, like a sunburn, which may appear in from one to seven days, and persist for several days or weeks. A little more severe grade of dermatitis is characterized by a more intense redness, vesiculation and slight swelling. This condition lasts longer than the simple erythema. Both cause sensations of mild burning, prickling or tension. Resolution may be accompanied by a slight desquamation and is sometimes followed by a moderate pigmentation, more pronounced in those of dark complexion. The third degree is a superficial gangrene of the skin, resulting in the formation of a painful, sluggish ulcer, covered by a tough, adherent slough. Such an ulcer may persist indefinitely. In addition to these lesions there are others of a permanent character which may develop gradually, usually several weeks or months after the subsidence of the acute symptoms, or sometimes as the result of repeated mild exposures without any preliminary acute stage. In well-marked cases the skin becomes thin, often slightly drawn and wrinkled and usually harsh, dry and mottled. Telangiectases appear scattered about the affected region and

slowly increase in size and number. The sweat and fat secretions are decreased, the hairs permanently lost and, if the fingers are involved, the nails atrophy and crack. Small plaques of hyperkeratosis frequently develop, similar in appearance to patches of senile keratosis, and like the latter they may undergo malignant degeneration. It is impossible to know beforehand in which cases these late manifestations will occur. As they produce a condition as serious and unsightly as many of the diseases for which the X-ray has been recommended, it is wise to limit the use of that agent to the treatment of diseases not amenable to other forms of therapy, or in which the cosmetic result is a secondary consideration. **TREATMENT:** The acute stages of X-ray dermatitis require a mild, soothing ointment, such as unguentum acidi borici. In the treatment of X-ray ulcers ten or twenty per cent of orthoform may be added to relieve the pain. Many ulcers cannot be induced to heal until they have been curetted and skin grafted. The late permanent lesions cannot be much influenced by any form of treatment. The keratotic patches may be removed by congelation with solid carbon dioxide, as in the treatment of a beginning superficial epithelioma.