

*Treatment with Scarlet Red Ointment.*—A 5% scarlet red ointment is sometimes used in the treatment of X-ray reactions on humans. In order to learn its effectiveness on the test animals, a 5% ointment of Biebrich's medicinal scarlet red in a petrolatum base was used in treating a group of 7 rats twice daily for 3 weeks. Of these none of the treated areas showed an increased rate of healing and in some the time of spontaneous healing appeared to have been prolonged.

*Treatment with Urea Ointment.*—Various reports (8, 9, 10, 11) in recent years have dealt with the effectiveness of urea in the healing of various types of wounds. In order to study its effectiveness in the treatment of third degree X-ray reactions, an ointment containing urea, 15 Gm., water, 10 cc., aquaphor, *q. s. ad* 100 Gm., was made and applied twice daily to a group of 8 rats. Of these only one area, or 12½% of those treated, showed an increased rate of healing. These results indicate that urea is ineffective in such treatment and, furthermore, that urea is not the healing agent in the *Aloe vera* leaf.

#### SUMMARY AND DISCUSSION<sup>2</sup>

1. Further observations are reported on the use of *Aloe vera* leaf in the treatment of third degree X-ray reactions on white rats. Sufficient data have been obtained to show that treatment with the pulp of the leaf definitely increases the rate of healing of such experimentally produced reactions. Furthermore, contrary to previous views, our results indicate that the pulp does not have to be fresh in order to be effective as a healing agent. It should be noted that all of the reactions produced in this study are of the acute type and not of the chronic type which sometimes appear on humans many months after the original irradiation.

2. One source of error was noted during the study: The anterior areas of the rats were more resistant to irradiation than the posterior areas. The anterior areas were sometimes smaller than the posterior at the beginning of treatment; consequently, the former occasionally healed normally at a faster rate than the latter. This fact makes the observed results for increased rate of healing somewhat high for all groups of rats treated, but in the later parts of the study the error was overcome to a certain extent by treating alternate anterior and posterior areas.

3. Contradictory results were obtained with the fresh rind of the leaf, the rind from one shipment of leaves being more effective than the pulp in promoting healing, while the rind from two other shipments of leaves gave negative results. The different season of the year in which the latter shipments were collected, or, perhaps more likely, the poor condition of these leaves when received, is offered as a possible explanation for these negative results. It is believed, from our observations, that the healing agent of the leaf is concentrated in the rind. Further work is under way to clear up this question.

4. Results obtained with aloe ointment, scarlet red ointment and urea ointment show that none of these are effective in promoting healing of acute third degree X-ray reactions in the skin of white rats.

#### REFERENCES

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#### CORRECTION

July, 1941, Issue, page 181.

Change heading of list of compounds in second column from "Substituted Acetylureas" to "Substituted Acetamides."

<sup>2</sup> Our thanks are due Dr. E. A. Pohle, Professor of Radiology, Univ. of Wis., for his kind coöperation in this study.