

are hopeless from the point of view of surgery, radium has shown itself to be invaluable, and there now appears to be no doubt that it exerts a reliable influence upon many forms of malignant growth.

THE VALUE OF RADIUM IN CURING DISEASE.

Among the most brilliant results which have been obtained from radium from this point of view are those in cancer of the skin and mucous membranes. This applies especially to basal-celled epithelioma and rodent ulcer. Other types of epithelioma are more refractory, most notably the squamous-celled variety, those accompanied by peripheral lymphangitis, and those recurrent in a cicatrix. Owing to this it was believed a few years ago that such forms of cancer were incurable by radium, but it is now generally recognized that the reason for failure was insufficient dosage. The squamous-celled variety of epithelioma required three or four times as much radium as the basal-celled variety in order to completely eradicate the disease and thus make recurrence improbable.

One great advantage of radium over surgery is that it leaves supple skin, with very little scar formation, whereas after operation there is a contracted scar, which is frequently the site of recurrence, owing to the irritation to which it is constantly subjected. I have frequently noted a reappearance of the disease at the site of stitch wounds. The value of radium in this connection will be appreciated when we remember that one of the facts which are definitely established in regard to cancer is that irritation is an important factor in its aetiology.

Radium also has a wide field of use in the disease of the skin and mucous membrane other than malignancy; so much so, that its employment by modern dermatologists is almost imperative. Benign tumor growths, such as moles, warts, papillomata, are removed by it, while in the treatment of disfiguring birthmarks, either port-wine stains or angiomas, it is the method of election, as its application is easy and painless and its cosmetic results are not attained by any other method.

In keloid, lupus erythematosus, tuberculosis of the skin in its various aspects, it is of the greatest value. Leucoplakia of the buccal mucosa or tongue, which is often the forerunner of malignancy, responds favorably to radium therapy.

A recent report of the London Radium Institute states that experience there tends to show that rodent ulcer can be cured with certainty by the application of radium, and, provided that a sufficient dose is given, does not recur.