

ner in which the tissues respond to the treatment. It is advisable to employ unscreened plaques of 100,000 radio-activity, containing 4 milligrammes of radium, and in the first place to give applications of an hour's duration on four successive days. In many cases one such series of applications will suffice, a scab forming in from ten days to two weeks, which gradually loosens and falls off, leaving a smooth, non-depressed scar, scarcely distinguishable from the surrounding skin. It is important that, if possible, the scab should not be interfered with, but allowed to detach itself naturally. If there should be suppuration beneath it, mild antiseptics may be applied. It is also advisable that the plaque should be rather larger than the ulcer, in order to include any foci which may be in the course of development outside the visible limits of the lesion. In the case of very small ulcers, practically no inflammatory reaction is necessary, but if the ulcer is larger and deeply situated, and if time is an important consideration, it is advisable to employ sufficiently strong doses to result in a certain amount of destruction. If there appears to be thickening of the subcutaneous tissues after the removal of the crust, applications of larger duration may be given, light lead screens of one or two-tenths of a millimetre in thickness being used to screen the plaque.

In an experience of between sixty and seventy cases, not one has failed to be benefited by radium treatment. Where the ulcer has extended deeply and involved bone or cartilage complete healing is not always to be obtained, but the advance of the process can be controlled. When confined to the soft parts, one can almost guarantee results.

*Fungating Cutaneous Epithelioma.*—Of this condition a very small proportion of cases do not yield to radium treatment, and Barcat and Balzer report 160 cases, nine only of which were unsuccessful. The failures are usually those cases in which radium therapy has not been resorted to until they are in a very advanced stage. As regards the method of treatment, radium may be used alone, or the growth may be treated surgically by curettage and subsequent applications of radium, the latter procedure being advisable if it is necessary to economize time.

As a rule, the operation can be performed under local anesthesia, radium plaques being applied forty-eight hours later, the dose being sufficiently large to destroy all peripheral cancer cells. In cases in which it is impossible or inconvenient to give fairly frequent applications, it is necessary to induce a more severe reaction than in those which can be kept constantly under observation.