

round and beneath the plaque. Trying the effect of the separate rays, it was found the beta rays arrest growth and the gamma rays seem to have no effect.

When we once understand exactly the effect of each of these different rays, we can apply the different kinds of rays and get the different results of each. Dr. Abbe thought that the whole question of the popular stories of radium in the treatment of cancer, as written in the press, should be suppressed.

Whether applied to papillomata, those heaped-up cell masses of the skin and mucous membrane, to the epitheliomata of the skin and mucous membranes, or to those increased formations of the squamous cells or basal cells of the skin or to the myeloid tumors, those central tumors of bone, or the pure myomata or the tumors of glands like the parotid or thyroid, to all invasions of the normal tissue with overgrowth of the cells normal to the part, the result is the same. These weaker cells are driven back into ordinary growth. The fact of the surrounding cells not being injured and these cells constituting the local disease being destroyed, shows that the weaker cells have been first attacked and that they have been destroyed. Troublesome papillomata of the vocal cords disappear very quickly under radium. Cases of this sort presented proof that mucous membrane cells are not affected by radium, while the papillomata cells were caused to disappear.

NOMENCLATURE FOR RADIUM THERAPEUTISTS.

Pathologists may name tumors as they choose, but the nomenclature for radium therapists is (1) those tumors that are cured by the use of radium, (2) those tumors that are not cured.

THE PENETRATING POWER OF RADIUM.

To exhibit the penetrating power of the radium rays Dr. Abbe showed a picture of a granite boulder with a radium tube lying on it and a photographic plate underneath the stone. In this experiment some 50 milligrams of radium photographed itself through six inches of solid granite. This experiment has been carried out on a larger scale, passing through boulders as thick as twenty inches. If a piece of radium is lost upon the carpet and a plate is held over it, the portion there will photograph its own photograph on the plate. If the radium is not seen the piece of carpet can be sent to the laboratory and the radium present in it recovered there.