

advocated by Dr. Robinson as sound, supported as it is by clinical experience, and based upon a recognition of facts gained from a knowledge of the true pathology of the disease. He narrated the history of a case in which a superficial epithelioma of the forehead recurred after excision. Three years ago the recurrent growth was excised and the wound burnt thoroughly with caustic potash. There has been no return. He asked Dr. Robinson's opinion as to the difference between rodent ulcer and epithelioma.

Dr. A. B. Macallum said the question of interest to him was whether or not the disease was parasitic; he still adheres to the opinion that the disease is due to the presence of a special organism. Referring to Dr. Robinson's remarks concerning the relation of the cells in a secondary growth to the cells of the primary tumor, Dr. Macallum stated that he had a specimen of a growth in the liver which shows a direct relationship between the liver cells and the cells of the growth, the latter being apparently descendants of the former. This would also bear out the parasitic theory of origin. The parasite is always lost sight of in the treatment, and rightly so; the growth of the epithelium is very properly the thing taken into consideration. A single cell is sufficient to continue the growth and to cause recurrence. Certain experimenters have taken the pathological epithelium of cancer and introduced it into the tunica vaginalis of the rat; a great number of cells necrosed, a few survived and were found growing and proliferating, forming secondary growths in the peritoneum; occasionally only one cancerous nodule appears as a secondary growth: such a nodule starts from a single cell. There is said to be no specifics for cancerous processes, but the treatment by caustics is of that nature. Albumins are dissolved and compounds formed which are very poisonous to the tissues. Caustic potash causes the production of a poisonous albuminate which kills the epithelial cells. Nitric acid acts by giving rise to an acid albumin which is destructive. We have something of an analagous nature in the fact that proteids are found to be the prime agents in vaccination.

Dr. Ferguson asked if Dr. Robinson would recommend the injection of irritants into affected axillary glands.

Dr. Atherton has never employed caustics; he

believes that 50 per cent. of epithelioma of the lip are cured by the knife and do not recur.

Dr. A. A. Macdonald referred to the usefulness of caustics in certain cases where the knife cannot be employed; he illustrated his remarks by referring to a case.

Dr. Reeve stated that in his experience with epitheliomata about the eye, he finds that the patients rarely present themselves until the tissues are pretty well infiltrated. In these cases, although we think that we have removed the entire growth, and although a plastic operation may have given an apparently perfect result, yet there is always a fear entertained of recurrence. Dr. Reeve thinks that the best course of procedure would be to remove the growth with the knife, then apply caustics, and do a plastic operation at a later date.

Dr. Powell and Dr. Price Brown narrated cases successfully treated by caustics.

Dr. Robinson, in reply, stated that great difference of opinion exists as to the diagnosis between rodent ulcer and squamous epithelioma. He fails to see any difference between a rodent ulcer and an infiltrating epithelioma. As to the etiology, Dr. Robinson regards epithelium as possessing just as much ability to form a new growth as fibrous tissue, or any other form of tissue; but in the variety of tumor we are considering to night, one inclines to the parasitic theory in studying the etiology. The question is whether these growths are merely hyperplastic or not; the epithelium passes into the lymphatic spaces and extends rapidly. Microscopic section will show the organisms to be of similar character in different forms of tumors, and it is a question as yet to be settled whether or not these act as an exciting cause. As to the secondary growths, such as those instanced by Dr. Macallum in the liver, the difficulty of studying the process is great; we find that the peculiarities of the cells of the secondary growths have always the characteristics of those of the primary tumor. The tendency of inheriting the ancestral characters of the cells, even in their arrangement, would tend to show that the cells in the secondary growth do not originate from the cells of the organ which is the seat of the secondary growth. We sometimes observe a cancer of the jaw, and on the lip, high up, in contact with the tumor, another