A HISTOLOGIC STUDY OF THE EFFECT OF THE CLINI-CAL USE OF VARIOUS ANESTHETICS ON MOTOR AND SENSORY NERVE-ENDINGS INTO AND AROUND THE ANUS

ROBERT G. GRENELL New York University

An investigation was undertaken to determine the visible histological changes in the nerve-endings, brought about by the injection of various anesthetics. The first step in the investigation was to study preparations of normal, unanesthetized nerve-endings. Sections were made of the skin and muscle around the anus of cats and mice (and will be shortly prepared from fresh human material), employing various stains in an attempt to determine the best one for the present purpose. Gold chloride failed to show the necessary structures, and subsequently a silver stain was used as described by Dr. J. F. Nonidez of Cornell University. The results of the application of this technique have been satisfactory as far as the investigator has progressed, but no conclusion can be reached until human tissue itself has been employed. As soon as fresh surgically removed material can be obtained, the investigator intends to employ various anesthetics such as Eucuprin, for purposes of injection. Microscopic sections will be prepared of this injected tissue, and the varying effects of the different types of substances applied will be observed and tabulated.

The ultimate aim of the investigation is to aid, if possible, in the surgical and clinical handling of nervous tissue in Proctology, by preventing the occurrence of unnecessary injuries, due to lack of information concerning the proper anesthetics to be employed, and

their effects.

The investigation was suggested by Dr. Edward Levy of the Polyclinic Hospital, New York City, and is being carried out in relation to further work by him, of a similar nature.

A STUDY OF THE ACTION OF CERTAIN DRUGS ON THE VESSELS OF THE DOGFISH

J. T. Halsey and Benton Minnich Tulane University

Mackay, 1931, using skates, and Wyman and Lutz, 1932, using dogfish, found that adrenalin caused a marked augmentation of the blood pressure. To the latter authors, the results suggested "a vaso-constrictor action of adrenalin, peripheral to the gill capillaries," but, "neither recording the venous outflow from the excised spiral valve (the blood vessels of which were perfused with adrenalin solutions) nor microscopic observation of the minute vessels of the tail, during