

Silberberg (2) reported his experiences in the guinea pig with anterior pituitary treatment following partial thyroidectomy. In Figure 6 of his report he illustrated a section of guinea pig thyroid taken from an animal which had received 18 days' treatment with 1 1/2 cc. of anterior pituitary extract in daily dosage following removal of one lobe of the thyroid. The appearance illustrated was entirely comparable to that seen by Collip and Anderson. It showed evidence of hyperplasia plus a moderate degree of involution despite continuous and prolonged treatment.

A similar appearance was incidentally noted by Schockaert (3) in the duck treated by fresh suspensions of anterior pituitary of heet. In subjects treated 19 to 24 days a pathological picture similar to that of the thyroid of man in the chronic stages of Basedow's disease" was recog-



Figure 3. Camera lucida drawing of thyroid gland of rabbit No. 701, which received treatment with a proved thyrotropic extract for twenty-eight days (involutional and atrophic (x 430).

ized. His illustrations indicate stages of partial involution and regressive hyperplasia in these animals. No definite evidence of atrophy was seen and no metabolic data at this level of "thyroid stimulation" were recorded. However, the extensive metabolic data collected by Szarka (4) and reported by Evans in his recent monograph indicated a primary rise in oxygen consumption in rats subjected to treatment with anterior pituitary alkaline extract. The rise was not found if the injections were preceded by total thyroidectomy. It was not eliminated by castration. The role of the thyroid in the metabolic rise, as independent from the gonadotropic effect of extracts, was therefore quite clear. These authors could offer no explanation for the gradual decrease of the oxygen consumption on prolongation

of the treatment. After consumption below the oxygen consumption total obtained following total this decreased metabolism was not stated, but meant to cessation of treatment maximal metabolic degree these findings in the high pituitary treatment as reported by Friedgood (5) drew treatment reproduced the anterior quite faithfully, in quite similar to that seen gested as an alternative "possible exhaustion of The studies of Ma normal to hyperplastic longed hyperplasia" and gland. The re-intro thaline goiter stimulate after iodine treatment. well summarized by Collip and incidentally seen to those which we have view is brought forward application of the thyroid involution of the thyroid non-surgical means seen Thyrotropic hormone form (Collip and others for the above purposes Our experience in of pituitary origin was suitable for these purposes any important effect n