

# Selected Articles.

## PROGRESS IN ORGANOOTHERAPY.<sup>1</sup>

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The basis of a great therapeutic advance was established when it was demonstrated by Eiselsberg in 1890 that the clinical syndrome resulting from total extirpation of the thyroid gland—and comprehended in the designation cachexia strumipriva—could be prevented by transplantation of the removed organ in a new situation. Schiff, who in 1856 had observed that extirpation of the thyroid gland was followed invariably in dogs by death, and who was able in 1884 to confirm his earlier observations, found that death could be prevented under these circumstances by grafting a portion of the gland beneath the skin, or within the peritoneal cavity. In 1877 Ord pointed out changes in the thyroid gland in cases of myxedema, and in 1882 J. L. Reverdin called attention to similar changes in the sequence of surgical removal of that gland. In 1883 Semon suggested a causal relationship between the loss of thyroid function and the resulting symptoms; and the validity of this proposition was shortly afterward established by an investigation conducted by a special committee of the Clinical Society of London. In 1890, independently of the observation of Eiselsberg, Horsley suggested grafting of sheep's thyroid in the treatment of myxedema, and a little later this suggestion was successfully acted upon by Bettencourt and Serrano. In the same year Vassale prevented the development in dogs of the phenomena following thyroidectomy by intravenous injection of an extract prepared from the removed gland, and in the following year Murray treated successfully a case of myxedema by hypodermic injection of an extract of thyroid gland. It was soon found that the same good results could be secured by the administration by the mouth of the gland itself or of an extract prepared from it, and the long record of successes that has marked the therapeutic employment of thyroid gland in one form or other elicits the warmest admiration for the scientific acumen and the professional zeal that guided the successive steps by which the underlying principles of organotherapy have been established upon a firm basis.

Within the comparatively short period covered by the discoveries narrated, a vast literature upon the subject has grown up, and the matter has attained an importance the magnitude of which we are even yet scarcely able to realize. Not only has the use of thyroid preparations been extended to the treatment of diseases other than those in which its utility was first demonstrated, but the principle on which this practice is based has been applied to a far wider range of therapeutic purposes; and almost every day brings some new development in this promising field. Already physiologists have succeeded in isolating from the thyroid gland a body designated thyroiodin, which is capable of much of the therapeutic usefulness of the gland itself. The benefits of the new therapy have accrued not only to the physician, but to the surgeon as well; for the latter has learned in the removal of organs physiologically concerned in some way in the bodily metabolism—and few, if any,

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