opinions are held as to the importance of adrenalin in physiological activities; the earlier investigators perhaps tended to exaggerate the rôle played by this substance. Stewart and Rogoff, on the other hand, are inclined to belittle its importance, while Cannon thinks that it acts chiefly in emergencies.

The balance of experimental evidence favours the view that the administration of small doses of thyroid in healthy animals is followed by hypertrophy of the suprarenals, especially of the cortex, while the adrenalin load of the chromophile tissues is increased. No increase in the adrenalin content of the blood has been satisfactorily established in conditions of hyperthyroidism; this may or may not be due to the fact that the biological methods for determining the adrenalin content are not strictly reliable. The effects on the adrenals of hypothyroidism are indefinite and inconclusive.

There is a large amount of evidence that the secretion of the thyroid has a sensitizing action upon the structures stimulated by adrenalin, the action not necessarily being a specific one. In this connection it has been suggested by Asher and Flack that the phenomena of Graves' disease can be ascribed to the action of adrenalin upon structures which have been sensitized by the existing hyperthyroidism.

The author regards it as probable that the effects of hyperthyroidism on suprarenal activity are due rather to changes in general metabolism than to some specific influence exerted by one endocrine gland upon another.

J. L. Birley.


The experimental investigations recorded in this communication were carried out before the war. The animal used was the rooster, on account of its well-marked secondary sexual characteristics. After removal of one testis and ligature and resection of the opposite ductus deferens, the testis, with or without preceding swelling, becomes atrophic, with increase of its interstitial tissue and degeneration of the seminiferous tubules. There is no change, however, in the secondary sexual characteristics, and the interstitial or Leydig cells are unaffected. Removal of the atrophic testis is followed by rapid loss of secondary sexual characteristics. These results are identical with those obtained in rabbits by Ancel and Bonin in 1904.

No changes are found in the hypophysis after ligature, but castration is followed by hypertrophy of the pituitary and increase of its eosinophil cells, as previously recorded in 1905 by Fischera.

Peritoneal grafts of testicular tissue were rarely successful, and led to no important results.

J. L. Birley.


The author suggests the following simple device for supporting the paralyzed cheek in the acute stage of facial palsy. A strip of adhesive plaster
about 1½ in. wide and 1¾ in. long is applied to the scalp well up on the
temporal region. Next, a similar strip 2 in. in length is folded at one end
for about ¼ in. as reinforcement, and into this two perforations are made.
Another strip about 3 in. long is reinforced as before and correspondingly
perforated; its other end is divided longitudinally for about 2½ in.
Finally, two cords are inserted vertically into the four perforations, and
the device is then ready for use.

The support is applied by firmly pressing the smaller strip over the
permanent one already adherent to the temporal region, adjusting the
divided one to the sagging cheek, and then approximating the free ends by
tying the cords securely. The space intervening between the two strips
affords freedom from pressure on the wrinkles necessarily caused by
elevation of the cheek. Such a facial splint is adjustable, comfortable,
inexpensive, and easily removed and renewed. It lessens the mechanical
difficulties which arise in talking and mastication, hastens recovery by
removal of strain, and blocks the intermittent tug from the sound side.

R. M. S.

[80] Radium treatment of tumours of nerve tissue. A discussion
before the New York Neurological Society.—Bagg, Ewing, and

Experiments are described on the reaction of healthy nervous tissue to
radium emanations. These showed that the healthy brain was relatively
resistant, whether to radium actually implanted or to strong radiations
through the scalp. For treatment of new growths, application of heavily-
filtered radium, or the burying of small quantities of unfiltered radium in
the tumour, are the methods recommended. The tumours most likely to
be favourably influenced are those with embryonic cells and blood-vessels
and little connective tissue. Gliomata, therefore, should theoretically be
specially suitable for treatment. The clinical results are so far doubtful,
and in the discussion various observers were not impressed by the use of
radium in gliomata.

Frazier’s conclusions seem to indicate the general position. These are:
(1) That radium will retard the growth of endotheliomata; (2) That there
is no evidence warranting the assumption that radium influences the
course of gliomata; (3) That radium has proved effective in lesions of the
pituitary body; (4) That radium is now employed (a) as a prophylactic
against recurrence always after the removal of the growth, (b) as a
prophylactic against recurring visual disturbances after sella decompression,
(c) as an active agent by direct implantation in all inoperable growths
exposed on the operating table, (d) as an inactive agent by indirect
application in all inoperable growths.

It is best to give an under-dose by implantation, and to supplement
this by cross-firing from the outside of the head.

R. G. Gordon.