control fluid and new luetin or vaccine of Spirochaeta pallida, were ascribed to nonspecific and physical processes of antiferment adsorption.

4. In syphilis, nonspecific cutaneous sensitiveness is enhanced by some unknown mechanism, so that the intracutaneous injection of different substances is capable of engendering nonspecific reactions of greater extent than occurs in nonsyphilitic individuals.

5. The results of the present investigation indicate either (a) that true specific cutaneous allergy does not occur in syphilis or (b) that the cultures pallida employed have lost completely, or nearly so, in allergenic or anaphylactogenic properties.

6. In conducting intracutaneous tests, a control fluid should always be included, capable of engendering the same nonspecific reactions, or the amount injected must be small enough on the basis of actual tests not to elicit nonspecific reactions. These precautions are particularly necessary for intracutaneous tests among syphilitic patients, or in subjects with other diseases accompanied by enhanced nonallergic cutaneous sensitiveness.

THYROIDECTOMY *
A MODIFIED TECHNIC †
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OMAHA

Following the operation of resection of the thyroid gland for goiter, the undesirable technical results, although of relatively minor importance, not infrequently cause no little annoyance to the patient, and more or less conspicuous and tender nodule where the anterior muscles, sternohyoid and sternothyroid, were reunited after their transverse division for additional exposure; (3) an annoying adhesion between the trachea and the skin at the point of drainage, which also produces, here, a widening of the scar; and (4) an abnormal deepening of the suprasternal notch, due to a loss of the thyroid isthmus and retraction of the skin by the adhered trachea.

I here present a modification in technic, which has not only overcome to a marked degree these postoperative technical results, but has, in addition, with certain types of goiter given an easier and more rapid exposure of the gland.

EXPOSURE OF THE GLAND

The collar incision of Kocher, as originated and generally practiced today, extends down to the deep cervical fascia, making a flap of skin, fat and platysma muscle.

This type of flap, which leaves the sternohyoid and sternothyroid muscles immobilized by their covering of deep cervical fascia, is most applicable to all large goiters, in which a transverse division of the sternohyoid and sternothyroid muscles covering the gland is always necessary for exposure, and also to all small goiters in which only a moderate amount of retraction is necessary. The most frequent type of goiter operated on, however, is the one of medium size, in which midline separation of the anterior muscles and their fascial covering allows generally not sufficient exposure of the gland without a transverse division of these muscles.

With this type of goiter I extend the collar incision through the deep cervical fascia, and after ligating the anterior jugular veins, reflect the fascia as the inferior layer of the flap. This liberates the sternohyoid muscles to the extent that, with only occasional exceptions, they can be retracted sufficiently to allow all the exposure desired without their transverse division (Fig. 1).

* Thyroidectomy, removal of a portion of the gland.
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With these anterior muscles not cross-sectioned, we do away with the frequently persisting and tender nodule where they were reunited, which in addition allows a more rapid return of normal flexion and extension of the neck. The brawny induration so often seen beneath the flap composed of skin, fat and platysma muscle only, and due to the muscle adhering to the deep fascia, is prevented to a great extent by reflecting this deep fascia, the reunion of which to the muscles beneath results in very little, if any, noticeable induration.

**DRAINAGE**

With an increasing experience in goiter surgery, I am draining a smaller percentage of all cases. I have practically ceased draining all resected exophthalmic goiters with a toxicity of one on a scale of four, with excellent results. I fully believe in the other extreme, in very toxic exophthalmic goiter cases, of leaving the wound wide open, which I first saw the late Alexander Hugh Ferguson practice twelve years ago, and advocated at present, with greatly improved technic, by Crile.

Drainage, as generally practiced today, is through the midline, directly over the trachea; this prevents a complete reunion of the muscles and fascia, which allows in too many instances the adhesion between the trachea and the skin. This adhesion produces also the abnormal and conspicuous deepening of the suprasternal notch, particularly when the thyroid isthmus has been removed, which removal is generally necessary. Furthermore, the platysma muscle is absent in the midline, and the drainage tube therefore comes through the thinnest portion of the flap, resulting in a widening of the scar at this point.

**THREE-QUARTER INCISION**

The inferior thyroid artery may be ligated through a 2 inch incision, in direct line with the full collar incision to be used later in a resection of a hyperplastic gland (exophthalmic goiter). Frequently after making this small incision, in anticipation of ligating only one inferior artery after unsatisfactory superior pole ligations, I found the corresponding lobe so well exposed by a slight extension of this incision that I could easily resect this portion of the gland if the patient was withstanding the anticipated ligation better than expected. About six years ago this experience led me to adopt, with no little satisfaction, what I term the three-quarter incision for every operation in which it represented the first or second step in a two or more stage operation of bilateral lobe resection for exophthalmic goiter.

In the severe types of exophthalmic goiter there is no need of making an incision and a flap large enough on both sides to expose the entire gland, when only one lobe dare be operated on. Here I make the three-quarter collar incision through the deep fascia, full length on the side of the gland to be operated on and one-half the length or less on the opposite side; i.e., three-quarters the length of an incision necessary to expose the entire gland. After the deep cervical fascia is reflected with the flap, the anterior muscles directly over the lobe to be resected are easily split lengthwise, resulting always in an ample and rapid exposure (Figs. 4 and 5).

Draining these unilateral resections through the center of the three-quarter incision, away from the
trachea and suprasternal notch, has never caused an increase in scar formation at this point in the line of incision. This has led me to substitute lateral for midline drainage in all goiter operations when drainage was deemed necessary. The final results of single and multiple resections, with lateral drainage, with or without the three-quarter incision, always presented a better looking neck than when the drainage tube was brought out through the suprasternal notch directly over the trachea.

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THREE CASES OF ACUTE ENCEPHALITIS TREATED WITH SPECIFIC SERUM

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Ever since the pandemic of influenza, an unusually large series of cases of encephalitis has been observed. With each succeeding year the number of cases has gradually decreased; but if our experience is any criterion, there is still an excess of encephalitis over and above that previous to the pandemic.

Our clinical material during the past year has consisted in large measure of the sequelae and chronic residues of encephalitis, but we have also observed a number of acute cases, in three of which we used lumbar drainage and the usual symptomatic treatment, with a specific serum recently prepared by one of us (E. C. R.). This serum was obtained from a horse repeatedly injected with a streptococcus isolated from a patient suffering from typical encephalitis.

REPORT OF CASES

Case 1.—B., a girl, aged 5 years, became ill, Dec. 15, 1921. She weighed at birth 7 1/2 pounds (3.5 kg.); she had been breast fed. At the age of 6 months she had severe pyelitis, with remissions and exacerbations until the tonsils and adenoids were removed in August, 1921.

Physical examination was negative. The child was pale and listless, and did not feel well. December 24, she refused her meals and was very apathetic. The next day her temperature was 100.4; she was nauseated and rather excitable, and slept more than usual. An enema a cathartic and a mustard bath were given, December 26, but she slept eighteen of the twenty-four hours. The excitability gradually increased until Jan. 1, 1922. She laughed, cried or giggled, and moved around constantly. The leucocyte count was 9,000. January 5, restlessness became very marked, and abdominal pain developed; the leucocyte count was 24,000. Appendicitis was suspected, but no evidence of it found. The leucocytes at two-day intervals numbered 18,000 and 10,000.

January 10, because of extreme irritability, stupor and slight twitching of the extremities, a lumbar puncture was made, and 25 c.c. of fluid obtained under pressure. There were 18 cells to the cubic millimeter; no coagulum formed. The puncture relieved the child's irritability immediately; her mind became clear, and she had better control of muscular movements. January 12, her condition gradually returned to what it had been before puncture, but with more marked choreiform movements. No Kernig or Brudzinski signs were present. The eye grounds were negative, as were the tuberculin tests.

January 14, a second lumbar puncture was made, and 65 c.c. was obtained under considerable pressure. The fluid contained 50 cells to the cubic millimeter. No tuberculosis bacilli were found. After the withdrawal of fluid there was again a decided improvement, followed by a rapid return of the choreiform movements. When the child was seen, January 17, she was in a state of constant activity, moving around in her bed and having choreiform movements of her extremities, head, neck and trunk. Her sensorium seemed clear, and physical examination revealed nothing except a slight redness of the nose and throat and a general exaggeration of the reflexes. Swabs were taken from the throat and nasopharynx.

Fig. 1.—Perivascular and localized round-cell infiltration in the pons near the ventricle in rabbit; hematoxylin and eosin, X 1,000.

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