

operation. Such a dissection exposes all the area of the thyroid gland, and should be employed, especially by operators unaccustomed to this work. After the extirpation of the tumor, the muscles are united by suture; but, as this is one and one-half to two and one-half inches above the line of skin closure, the scar is broken and the skin does not become attached to and move with the upper muscle stump, as is so commonly seen. If it is desired to remove one-half the thyroid, the superior thyroid artery is first ligated at the upper horn which is then elevated and the posterior capsule opened and brushed to the midline. As the tumor is lifted, the one or two lateral veins are double clamped and ligated. The capsule is still further wiped inward and the lower lobe lifted, the inferior thyroid artery being clamped on a level with or above the capsule. Leaving the posterior capsule aids in saving the parathyroids. The isthmus is separated, clamped and cut.

Several dozen clamps are necessary at times, especially in exophthalmic cases, as the smaller vessels in these patients, from the thyroidism present, bleed like leech bites.

In the hard, rounded tumors the outer capsule should be penetrated to the shining capsule of the tumor within, which can often be enucleated. These are very safe cases for operative recovery. In the worst types of exophthalmic cases, after removing one half, which is usually the right, and the isthmus, the lower pole of the left side is elevated and the inferior thyroid ligated. An incision is then carried obliquely across this half of the gland from the isthmus to a point below the lateral vein. The lower part is removed and mattress sutures are used to stop bleeding. The removal of this part of the gland will cause more hæmorrhage than the removal of the other lobe and isthmus, but will be found to be worth while in both the immediate as well as the later results. The wound is washed with Harrington's solution, No. 9, before closing, in those cases which are to be drained; that is, in those cases in which the traumatic area will induce considerable wound secretion, and in the exophthalmics, because of the toxic nature of the secretion in these.

The practice of slowly giving large saline enemata by rectum seems to delay absorption in the exophthalmic cases, and restores fluid to the circulation in those in whom the operation is attended by considerable loss of blood.

These operations for goitre secure most surprisingly early results, the very worst cases often being able to leave the hospital in six days.

*Ulcer.*—Dr. Mayo does not consider acute duodenal or stomach ulcer suitable for operation, unless hæmorrhage or perforation be present. In cases of the latter, the stomach is opened, the bleeding point located, and sutured with catgut; linen sutures are also