Cases have been known to run a course of six weeks and terminate fatally by exhaustion; others last for months or years. When first seen by me, she had been ill only about three months, and she was then leucocythæmic. She has improved a great deal since then, and I think she will recover, but she is troubled with prolapse of the uterus and rectum, due to pressure of the tumor.

In the treatment of this condition, the most satisfactory results have been obtained from the administration of arsenic, quinine, and iron. Arsenic is a favorite remedy for all troubles of the lymphatic system. A free inhalation of oxygen is reported to have cured three such cases. In this instance we used first oxygen, and subsequently "electro-ozone," which is water saturated with ozone through the agency of electricity. It acts very much like peroxide of hydrogen, and is an active oxidizing agent. It was given in tablespoonful doses, three times a day, and has produced a striking effect on this patient in increasing the processes of oxidation. During the summer she has been taking it constantly, and has improved in color, tone, and strength. She is taking now some arsenic. As yet, surgical interference is attended by too great fatality to be thought of. It has been proposed to tie the splenic artery with a view of preventing its growth, and the method seems worthy of consideration. I shall perhaps at some future time propose to make an exploratory incision to determine the exact condition of the surface of the tumor, and also the existence and extent of adhesions. Of course the spleen has been removed many times,—about eighteen times for leucocythæmia, about fifteen times for traumatisms, hydatids, abscesses, or for painful enlargement of the spleen due to malaria. Out of sixty-six cases, twenty-two have recovered. This spleen would probably weigh from twelve to fifteen pounds. There is no reason to think it is malignant, except in the sense that leucocythæmia borders on malignancy.

TWO CASES OF TUMOR OF THE PAROTID REGION.

CLINICAL LECTURE DELIVERED AT THE UNIVERSITY HOSPITAL, ANN ARBOR, MICHIGAN.

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Ladies and Gentlemen,—My first case to-day is a woman, aged forty-nine, with a tumor in the right parotid region, which has been growing for four years. I think that the facial nerve may be involved in the tumor, and if I can dissect it out, so as to prevent hopeless paralysis of that side of the face, I will do so; but I have warned the patient that the facial nerve may be unavoidably cut.

I think it is probably a fibroma or enchondroma much like one we had last year, but I am afraid, from the age of the patient and its rapid increase in size within the past few months, that it may contain sarcomatous elements. I shall not make a bold cut, but shall dissect cautiously, as I might divide the facial nerve with my first incision.

These tumors are deceptive as to their apparent mobility, because the more superficial portions may move upon the deeper, while these are really firmly attached to the surrounding tissues.

Here you see this portion of the tumor, about the size of a hen's egg, passes deeply behind the lower angle of the jaw. I think it is an outlying lobule of the parotid gland; if the whole gland was involved we should have more fixity and the growth would involve the deepest portion of the gland, which is not the case here.

I make my incision through the skin, carefully dissecting down to the capsule of the gland, watching for any nerve-filaments that may cross my line of incision; then, starting from above, I shall try to enucleate the gland from above downward towards its pedicle, which contains the blood-vessels, effecting this by dry dissection as much as possible. Always tie the pedicle of these tumors, as there may be a small arterial branch, which if cut off close to the main trunk will cause such bleed-

ing as to require tying of the main artery; I tied it in this case, but there is a sharp arterial hemorrhage, which comes from directly over the course of the temporal artery, which I shall arrest temporarily by pressure.

The wound is now ready to close, the last vessel having ceased to bleed, yet it has required only eleven minutes; the time is not greater than would have been required with the more free use of the knife, with prolonged search for and tying of bleeding vessels. The question is, Did it originate from the gland-tissue? I have torn the tumor somewhat in taking it away; it was not cut into; I feel some hard substance in it, which may be calcareous matter or even true bone; I do not think from its history of four years that it can be sarcomatous.

Now, as I cut the tumor open, we find something which looks badly for the patient. It is glistening gray in appearance, and cuts like cartilage, while the surrounding tissue looks like a sarcoma, though the history is against this. My assistant, who has been suturing the wound, says she moves the right angle of the mouth: so we have not cut the seventh nerve.

I once spent a long time in dissecting out what I thought to be the facial nerve, and then found it to be shreds of fascia; it is better to be too careful than not enough so. I cannot see the nerve, so I do not think that I have gone through the deep fascia; but as there was a large artery cut, and not secured by an efficient ligature, which may have been the temporal, I shall instruct the attendant to watch the patient closely, and, if there is secondary hemorrhage, place a narrow roller bandage over the course of the bleeding vessel and apply the knotted bandage of the head until the wound can be reopened and the vessel tied.

Dr. Darling has closed the wound by using interrupted sutures, placing a very small rubber drainage-tube in the lower angle, and the outer dressings as usual.

[*One week later.*—The tumor which I removed at the last lecture had its origin in an accessory parotid gland, was sarcomatous as I suspected, and did not include the facial nerve or temporal artery. There was no recurrent hemorrhage from the vessel which was cut. There is now a scar about four inches in length, and no pus formed during the healing process.]

SECOND CASE.—Here is a tumor on the left side of the face in a woman of forty-seven years which has been removed once before. It is much like the one we had last week; it may be that the parotid gland is involved, and therefore the facial nerve and temporal artery.

If I should cut the nerve, I shall at once bring the two ends together by using fine catgut sutures,—that is, if I see the nerve; for you are apt to cut it without noticing it in this dense scar-tissue. A tumor in this situation was removed from this patient seven years ago. From experience we know that tumors of this region are likely to be malignant, and the report of Dr. Gibbes was that the mixed growth that we removed last week was sarcomatous. The same-sized growth as this, if on the arm, would only take a few strokes of the knife to remove, but in this region I shall do as much dry dissecting as possible with the handle of the knife and my fingers. I would again emphasize the importance of avoiding the use of the knife as much as possible in removing tumors of the neck, tying their attachments before cutting, as Professor Van Buren was once compelled to tie the carotid, because another surgeon had cut off a small branch close to the main vessel, instead of twisting, tearing, or tying off the pedicle.

As a tumor has been removed from this region once before, I find this one adherent to the surrounding parts, and I shall have to use the knife more than in the former case. As soon as I begin to enucleate the growth it breaks down, and the various nodules will have to be separately removed. It seems to be cartilaginous, and there is but little bleeding. This case closely resembles one that I operated upon in the clinic the latter part of last year, which I was successful in removing without injury to the nerve, although the tumor passed deeply behind the angle of the jaw and rested on the carotid artery. As the wound is much smaller than the one last week, we will employ a few strands of catgut for drain instead of the rubber tubing, and close and dress as in the former instance.