Treatment of goitre by iodine, mercury, and potash injections, and radical cure by operation / by George J. O'Reilly.

With the Author's Compts.

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TREATMENT OF GOITRE

BY

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AND

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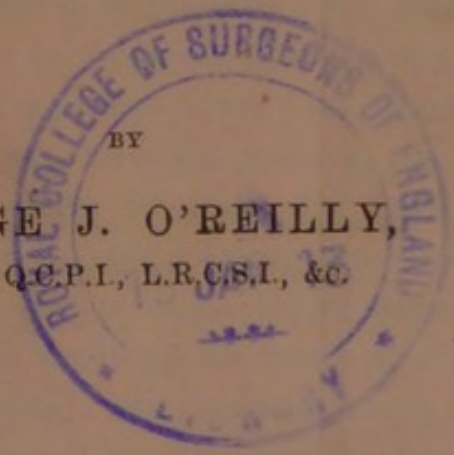

BY

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TREATMENT OF GOITRE

BY IODINE, MERCURY, AND POTASH INJECTIONS, AND RADICAL CURE BY OPERATION.

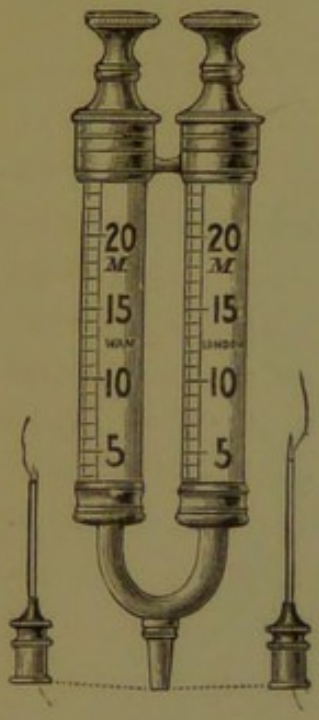
FOR some years I have been using Iodine, Mercury, and Potash injections for reducing glandular swellings with much success. Amongst them were cases of goître, and in not one has there been trouble of any kind caused by the injections. The case I am about to report is one of a goître of an enormous size, estimated to weigh some six pounds or more. The tumour was of thirty-six years' growth, as the patient remembers an enlargement of her neck since she was six years old; she is now in her forty-second year. It gave her much trouble for years, producing great difficulty of breathing, especially when she lay down at night (almost suffocating her), and of late entailing the necessity of having means ready to obtain boiling water, to inhale steam, so that she might get her breath at all; in fact, her life was a misery. She consulted me in September of last year to know if anything could be done to relieve her, when she gave me the above short history, with the addition that for four years she had consulted no one about it, as she was then advised never to have it interfered with in any way, as it would be most dangerous, and that very likely it was a cancerous growth; and that as all previous external remedies had failed, it was better and safer to leave well alone. I examined the growth very care-

fully, and came to the conclusion that it was an ordinary cystic tumour of the thyroid gland, which was very much enlarged, and I saw nothing to make me think it was of a cancerous nature. I explained to her the treatment she would have to undergo, and expressed myself hopefully that it would give her much relief and make her future condition considerably easier. She willingly consented to put herself in my hands and submit to the treatment I proposed—viz., the injections of certain drugs such as I had used in other similar cases. On Oct. 3rd I made the first injection of a solution of the perchloride of mercury, using a glass syringe with asbestos piston and the finest needle, made for me by Messrs Maw, Son, and Thompson. (See Fig. 1.) On this occasion I injected in three places where I felt cysts; this I repeated for six days in succession. After that there was a decided improvement in her breathing; she could sleep comfortably without coughing (which before had been incessant and most irritating), nor had she any other discomfort. After this I made injections only twice a week, Tuesdays and Fridays, alternating the mercury solution with one of iodine, a re-sublimated solution, and one of permanganate of potash (specially prepared for me by Messrs. Corbyn and Stacey of Holborn), sometimes injecting two of the solutions in different places on the one occasion. In all, I made some seventy injections, and, with two or three exceptions, there was not even discolouration of the skin. This treatment continued until the end of November, when the tumour was reduced to about one-third of its original size; during this time the patient was in excellent health, and doing with comfort her household duties.

The question now arose as to the radical cure by removing the entire tumour, which was now very consolidated and hard. I explained to her that it was a dangerous operation, as the

growth was of such long standing, and as there were sure to be adhesions to all the deep structures of the neck. She evidently was anxious that I should undertake it, and I readily acquiesced with her wishes. I made all my arrangements, and on Dec. 3rd I operated, and removed the entire

FIG. 1.



The "double-barreled" syringe, as represented by the woodcut, is so designed that by one insertion of the needle two purposes are effected. If the tumour is cystic, a quantity of the contained fluid can be withdrawn for examination; the other barrel, having been previously filled with the solution for injection, can then be used without removing the needle. I have found in many cases where the cyst was very much distended, that it was advisable, and even necessary, to withdraw some of its contents before introducing the solution, as by so doing there is no pain or fear of producing any inflammatory condition. In cases of suppurating glands it is of supreme importance, as they are gradually emptied, and in consequence no unsightly marks are left.

right lobe of the thyroid gland in its capsule, which weighed over two pounds. The steps of the operation were as follows: I made an incision about six inches and a half in length, reaching from the under jaw to the clavicle, and over the central part of the growth, and carefully dissected back the integuments and adipose tissue, and cut through the platysma and the anterior border of the sterno-mastoid muscle. I then laid bare the anterior surface of the tumour; but finding the wound was not large enough to separate the posterior surface from its deep attachments, I enlarged it obliquely towards the right ear, and this gave me ample space to grasp the tumour in my hand; then with the handle of an ordinary scalpel I was enabled to tear

through its attachments. It lay right on the internal carotid artery and jugular vein. There was considerable hæmorrhage from large vessels that had to be torn through; these I torsioned, and where necessary tied with gut. The isthmus was secured and tied in two places, and then divided with blunt-pointed scissors without any loss of

FIG. 2.

blood. The inferior thyroid artery gave me some trouble, as it was so deep down in the supra-clavicular fossa. In order to avoid including the recurrent laryngeal nerve in the ligature, an attempt was made to separate the artery from the other structures attached to the inferior angle of the tumour. In doing so a large vein was torn across. The bleeding for a moment was very great, but the vessel was almost immediately secured. The artery was then tied, cut through,

and the tumour removed in its entirety. No bleeding of any moment took place. All oozing points were nipped in a torsion forceps, and the wound swabbed out for some minutes with iodine water, and left open so as to allow the cold air to act as a natural hæmostatic. When all oozing had ceased I brought the parts together, leaving a drainage-tube (about No. 12 catheter size) at the bottom of the cavity.

FIG. 3.

The operation was done under fairly good antiseptic measures, and the wound dressed with antiseptic (mercurial) gauze and iodoform wool pads. The wound healed up without any trouble. There was slight sanguineous discharge from the drainage-tube, which I removed on the third or fourth day. There was no formation of pus, and I believe the wound would have healed up by first intention had I left out the drainage-tube altogether. The operation from

the first incision until the dressings were completed lasted one hour and twenty minutes. The patient remained under the anæsthetic for two hours after the operation; when she awoke she was slightly sick, but it did not disturb the dressings or cause any bleeding. When I again visited her in the evening she said she was quite comfortable and not in much pain, and she was

FIG. 4.

well able to take the liquid nourishment ordered. The temperature reached 99·6° on the evening of the second day after the operation; it then became normal, and remained so throughout the convalescence. She was able to sit up in bed on the fifth day, and was up on the ninth day. All the stitches were removed on the seventh day, when the wound was practically healed up. With the exception of some opening pills on two occasions, she had no medicine either before or after the operation.

She has made a perfect recovery. The wound is now only some two inches and a half long, and there is nothing unsightly to be seen. She is able to perform her usual avocations with greater comfort and in better health than she ever remembers to have enjoyed. I therefore consider that the injections are of immense value in reducing the size of the tumour, and, consequently, in giving much relief at once; and, again, of infinite value in consolidating the growth, so that, in case of operation, it can be easily detached from the surrounding tissues by the fact of the operator being able to grasp it firmly in the hand while separating it from the deeper parts. I may add that the left lobe of the gland was enlarged to about six times its usual size; this was injected several times, and also shared in the general reduction that took place before the operation. It appeared very large after the other portion was removed, but it is now its normal size. The strengths of the solutions of Iodine, Mercury, and Potassium that I used in this, as in all my other cases, vary from 1 in 10,000 to 1 in 500. In no case where I have used them in glandular swellings of the neck or elsewhere have they caused suppuration or left an unseemly mark, not even in very strumous children.

The engravings are taken from photographs. Fig. 2 represents the patient before the injections were used, Fig. 3 after two months' treatment by injection and four days before the operation, and Fig. 4 is from a photograph taken some weeks ago. The marks of the sutures have now entirely gone, and a cicatrix some two inches long is only apparent. I append the pathological notes made for me by Mr. Targett, curator of the Pathological Museum of the Royal College of Surgeons, who has also kindly prepared the tumour as a specimen for that museum.

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"*Description of specimen of tumour of thyroid.*—The tumour consists of the right lobe of the thyroid body, together with the attachment of the isthmus. When fresh it weighed thirty-three ounces. Its external surface is lobulated and marked by a deep longitudinal groove, due to the pressure of the sterno-mastoid muscle. It is covered by a tough fibrous capsule, which is permeated with numerous widely dilated veins. After preservation in spirit the tumour measures six inches and a half from above downwards, and four inches and a half from side to side, while its greatest thickness is three inches. On section it is seen to be made up of a collection of large cysts, together with a small amount of intervening solid material, and two or three encapsuled adenomata. Of these adenomata the largest is about the size of a Tangerine orange, and the section shows that it has undergone colloid degeneration. Occupying the centre of the preparation is an oval cyst, two inches in its longest diameter, the wall of which has become partly calcified. The remaining cysts are of various sizes, but all smaller than the above. The septa between them are in places so thin that they have become perforated, and thus intercommunication has been established. The cysts contained altogether five ounces of blood-stained fluid. Histological examination of the solid material between the cysts shows the normal structure of the thyroid body somewhat denser than usual, and without colloid change. The walls of the cysts are composed of very dense fibrous tissue, and are devoid of lining membrane. The cysts are probably due to dilatation of follicles, and the layer of cubical epithelium by which they were originally lined has been completely destroyed."

Royal College of Surgeons,
Pathological Museum.

THE ABOVE IS A REPRODUCTION FROM A PHOTOGRAPH QUITE RECENTLY TAKEN (JUNE 7TH, 1892), SHOWING THE PRESENT CONDITION OF THE WOUND.

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PREPARING FOR PUBLICATION.

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