MEMOIR

ON A

NEW MODE OF TREATING BRONCHOCELE,

BY DR. QUADRI, OF NAPLES.

COMMUNICATED IN

A LETTER FROM DR. SOMERVILLE TO THE PRESIDENT.

Read Dec. 22, 1818.

SIR,

IN the course of last Spring, I had occasion to see several operations performed for the cure of Bronchocele, by Dr. Quadri, an eminent Surgeon in Naples, which seemed so interesting, that I requested he would give me an account of his experiments, for the purpose of communicating it to this Society. With that attention which he lost no opportunity of shewing, he furnished me with an extract from that part of the journal relating to those cases, wherein I had seen either the operation or the effects resulting from it. I now have the honor to lay before the Society an abstract of

Dr. Quadri's letter to me, dated at Naples, the 29th of April, 1818.

I remain with great esteem,

Your most obedient humble servant,

W. SOMERVILLE.

SIR,

Every one knows that various internal remedies have been deemed adequate to accomplish the removal of Bronchocele, Goitre or Gozzo ; such as burnt sponge, the animal oil of dippel, burnt woollen cloth, muriate of lime, &c. ; but whether it proceed from these medicines disordering the stomach, or from the circumstance of some species of gozzo being of a nature not subject to their influence, or perhaps from the difficulty of duly preparing and administering them, to which last their failure is sometimes imputed by those who believe in their virtue, it is still unquestionable that Bronchocele is very prevalent. You even mentioned to me, that in travelling lately in Switzerland, you heard much of the efficacy of internal remedies in curing this disease, while your own observation proved its frequency, and moreover that even the families of eminent medical practitioners were not always exempt from it.

Having maturely considered the nature of the gozzo, the uncertainty, to say the least, of its cure by the use of internal remedies, as well as the

dangers incident to its extirpation by the knife, it occurred to me to try the effect of passing a seton through the substance of the enlarged gland, with the view of exciting suppuration, and also such a degree of irritation as might stimulate the absorbent vessels to remove a portion of it.

The first experiment was made on the 14th of November, 1817, in the clinical ward of our hospital, in the presence of many colleagues, pupils and others. The subject of it was Maria Carolina Trichiella, a native of the village of Casoria, then residing in the convent of Saint Anthony at Pausilippo, of thirty-six years of age, and suckling a child three years old. The circumference of her neck at the thickest part, including the gozzo, was sixteen inches, French measure, and the greatest apparent breadth of the enlarged gland measured five inches. By means of a trochar pointed needle six and a half inches long, I passed a seton from above downwards through the gland, at the depth of about four lines from its surface; suppuration took place in forty-eight hours. On the 18th of November the seton escaped when the matter was squeezed out, and the irritation occasioned by replacing it, produced an abscess on the right side of the neck, which was opened on the 23d, when it was found that the suppuration had effected the destruction of nearly the whole gland. I shewed this woman to you on the 26th of April, 1818,

free from gozzo, her neck measuring thirteen inches and six lines in circumference, instead of sixteen inches.

On the 23d of November I passed two setons, one on each side through the thyroid gland, in the direction of the longitudinal access of the neck of D. Concetta Panaro, from which copious suppuration resulted, with manifest benefit. It is however to be observed that the seton having been withdrawn from the left side of the neck, the superior orifice closed and a sinus formed, from which matter has continued to ooze these four months, the patient having obstinately refused to suffer a counter-opening to be made. The matter accumulates in a sac, from which it escapes by a very small aperture on the right side of the neck. The seton passed through the gland on the right side was retained six weeks with the best effect, the tumor on that side having disappeared, as you saw on the 8th of April, the circumference of the neck being then reduced to thirteen inches and two lines from fourteen inches.

On the 13th of December I passed a seton through an enlarged gland in the neck of Gelsu-mina Nuzzo, twenty-five years of age; the circumference of her neck, including the tumor, measured fifteen inches, the apparent breadth of the gozzo five and a half inches. The tumor was unusually hard, and the seton produced but little in-

inflammation and scarcely any suppuration; little improvement was perceptible in a month, I therefore enlarged the seton not less than eight times, to increase the stimulus, but ineffectually; various acrid and corrosive substances were introduced, amongst others, oil of turpentine, spirit of wine, red precipitate, alum, diachylon plaister with gums, &c. but to no purpose. At length, on the 15th of March, 1818, I introduced two pieces of the root of black hellebore attached to the seton, each about an inch long and three lines in diameter. This soon occasioned extensive inflammation and suppuration, accompanied with such diminution of the tumor that the left side of it is almost gone. On the 1st of April another seton was passed through that portion of gozzo on the right side, to which a piece of hellebore has since been added, producing also inflammation and profuse suppuration; and the circumference of the neck is now reduced to fourteen inches and two lines from fifteen inches.

On the 4th of February I passed a seton from left to right transversely through a gozzo, on the neck of Antonia Mosca, a robust young woman, aged eighteen years, from Afragola. The tumor was soft, the circumference of the neck measured sixteen and a half inches, and the breadth of the tumor six inches. The seton produced inflammation throughout the left side of the gland, which was materially augmented by the introduction of helle-

bore on the 15th of March, and it was kept in the wound three days. In the end of March, after withdrawing the seton, the wound healed rapidly, scarcely leaving a vestige of gozzo on the left side, and such diminution had taken place on the right, that the neck now measured only fifteen inches. This girl had occasion to go to her family on the very day that I had determined to pass a seton on the right side of her neck.

The subject of the fifth experiment was Maddalena Pagone, also from Afragola, twenty years old, of a full habit of body, having a gozzo so hard, small and deep seated, that I could not fix the gland sufficiently to be able to penetrate its substance. The seton was then introduced superficially to the gland, but with so little advantage that it was removed in the end of March, and it was my intention to endeavour to pass a seton transversely through the gland, having fixed it with my left hand, but my patient chose to accompany her friend Mosca. The diminution of the gozzo only amounted to about five lines.

On the 6th of April Pagone, already mentioned, brought to the hospital her friend Maddalena Gentile, nineteen years old, a native of Afragola, having a large gozzo measuring six inches in breadth, the circumference of her neck nearly seventeen inches. Pagone had told her, that her gozzo being *feminine*, that is to say soft, was more likely to de-

rive benefit from art, than her own or that of Nuzzo, both of which were *masculine*, a prognosis in which I concurred. The patient being of a timid disposition narrowly watched my hands while examining her neck, still declaring her willingness to submit to an operation, provided her mother consented. Under pretext however of measuring her neck, I passed a seton transversely through the greatest dimension of the tumor, at the depth of about six lines, without her even suspecting that the operation had been accomplished. I secured the seton by a knot, and permitted her immediately after the operation to walk home to Afragola, distant from Naples a few miles, and she came back to the hospital next morning to undergo the necessary treatment. The suppuration produced by this seton is so copious and so good, that I have not a doubt of the favorable termination of the case.

On the 13th of April Luigi Pagone, a boy of thirteen years of age, nephew of Maddalena above-mentioned, came to my house, having a gozzo divided into two distinct portions, somewhat like testicles in the scrotum, the left larger and descending lower than the right ; the circumference of the neck measured thirteen inches, the tumor was three inches broad. I introduced the needle, endeavouring to perforate the gland pretty deep, and there is little doubt of my having reached to the level of the larger branches of the thyroid ar-

teries, for an unusual quantity of blood, perhaps more than an ounce, flowed from the wound. The tumor seemed to swell as if injected with blood, snow was therefore sent for to restrain the hemorrhage, but the application was not required, as the bleeding ceased spontaneously, and even the infiltration into the gland was no longer perceptible. The boy recovered from deliquium, which did not continue more than half a minute, and was able to walk from my house to the hospital. Every appearance was favourable on the 14th, and supuration took place on the 15th.

From what has been stated, it is proved that it has been possible to pass a seton through the gozzo, sixteen times, varying the direction in every instance, without the occurrence of any untoward accident, while it seems to me to shew, that scarcely a possibility of danger is to be apprehended in performing this operation; of this I am so well satisfied, that although in the first five cases I thought it necessary to obtain the fullest concurrence of the patients and their relatives, and even then operated with some anxiety; the operation was however performed in the two last cases without apprising the patients. Unless the needle were pushed deep enough almost to touch the scutiform cartilage at its external edges, the principal trunks of the thyroid arteries will not be exposed to injury, while any others in the course of the needle will not be found large enough to occasion danger. No uneasiness arises

from the injury of nerves lying in the way of the needle.

The following practical inferences may be drawn from a consideration of the cases narrated, namely, that it is not dangerous to perforate the Bronchocele with a trochar pointed needle, carried deep into the gland, provided it be not brought near the cartilage. 2dly. That the consecutive inflammation is productive of very trifling inconvenience to the patients, as we have seen in the instances of Trichiello and Panaro. 3dly. That in some cases the gozzo may be destroyed by simple mechanical means, as in the two first mentioned. 4thly. That when the irritation of the seton is not adequate to excite the requisite degree of inflammation, it may be successfully obtained by the introduction of hellebore. 5thly. That it is expedient to retain the seton in the tumor for a considerable length of time, in order to keep up the suppuration until a cure is accomplished, as well as to prevent the formation of sinuses, as in the case of Panaro. 6thly. That the beneficial effect of suppuration rarely extends throughout the whole substance of the gland, but in general only destroys that portion of it contiguous to the perforation.

The observations which follow are taken from my journal after a cure was nearly effected in the cases related :

1. In the immediate neighbourhood of the part through which the seton passes externally, an irregular fungous margin usually rises up, which it is expedient to remove with scissors, on withdrawing the seton, to prevent deformity.

2. After suppuration ceases, and the wounds are perfectly healed, the curative process goes on in some examples, and the gozzo continues to diminish until it is totally dissipated, as we have seen in the cases of Panaro, Nuzzo, and Mosca.

3. The skin which has been distended in covering the gozzo, remains corrugated a short time after the cure, but it soon resumes its natural appearance; this has happened especially to Trichiello.

4. The cicatrices left by the seton are at first dimpled, and the skin seems to adhere to the thyroid cartilage, along the course of the threads. Trichiello and Panaro had some degree of deformity arising from this circumstance, but in the course of two months it had diminished greatly in both.

In perforating the portion of gozzo that remained in the neck of Nuzzo, the needle met with a good deal of resistance at the part where the former seton had penetrated, shewing that the interior surface of the wound adheres, rendering it, in

my opinion, extremely unlikely that a gozzo destroyed by seton should recur. It remains to be ascertained by experience whether or not every variety of gozzo admits of cure by seton? Whether or not hellebore should be resorted to in every instance, or is likely under any circumstances to produce bad consequences? I have seen severe vomiting ensue soon after the introduction of hellebore, but it soon subsided.

Extirpation of gozzo is said to have been unsuccessfully tried by many, particularly Dessault, of Paris, and I have lately heard that Professor Waller, of Landschut, in the course of last year tried to pass a ligature round the thyroid arteries, and by this means succeeded in curing gozzo; but this operation seems to me dangerous in the execution, and as yet uncertain in its result, as collateral branches very soon supply the place of obliterated trunks. It is not impossible that Professor Waller may have owed success to the inflammation and suppuration, and to the degree of absorption excited by the ligature acting as a seton.

Since I began to write this letter I have performed two operations similar to those already described, with favorable prospects, and I hope soon to be able to send you more observations on this subject.

I am, &c.

GEO. BATTISTA QUADRI.