

fluid, with which the lint was saturated before it was introduced. The rest of the dead cyst-wall came away in two or three large pieces. The discharge gradually became odourless pus. The cyst contracted, and at length (a month after the operation) closed, leaving only a linear scar with a very limited amount of thickening about it, which could be covered by a florin. He is now quite active, and his health is excellent. Nothing abnormal can be discovered by an examination with the laryngoscope.

This case is remarkable, not only for the great size which the cyst attained and the consequent displacement which it effected of the trachea and larynx and other adjacent structures, but most of all for the communication which had been established between the cavity of the cyst and that of the pharynx. So far as the cyst itself only was concerned, and had the patient's life not been threatened by suffocation or poisoning, this would probably have led in time to a natural cure. It was certainly a strong hint and encouragement to make a counter opening in the manner described. For while by this means there was every prospect of averting immediate danger, there seemed, considering the changes which the interior of the sac had already undergone, little or no risk of producing either local or constitutional disturbance by the operation; on the contrary, there was the best chance of reducing both.

These cysts in the neck have occasionally given way spontaneously. Thus Mr. Phillips\* has related a case in which "a small crack took place in the covering of the tumour, and above three pints of a reddish serous fluid escaped." This was followed by a sero-purulent discharge for many weeks; but "a small fistulous communication with the sac remained." A case is also related by Wernher,† in which a congenital multilocular cyst opened externally by several apertures, and, gradually contracting, was at length obliterated.

But among recorded cases, I can find only one which opened in a similar manner to this. Fortunately, the specimen is preserved in the museum of St. Bartholomew's Hospital. It is thus described:—

"A larynx, pharynx, and adjacent parts, with the thyroid gland. The right lobe of the gland is enlarged by the formation of a cyst, of more than four inches in diameter, in its interior. The walls of this cyst appear to be formed by the distended tissue of the gland; its interior is rough, and has a large quantity of lymph deposited upon it, some of which hangs in it in loose shreds. At its upper part, the cavity of the cyst communicates with that of the pharynx by a narrow ulcerated aperture (indicated by a piece of glass) near the arytenoid cartilage. The isthmus and left lobe of the gland are healthy.

"The patient was an elderly woman, and the enlargement of the gland had long existed. The cyst at first contained a fluid like serum, which, when withdrawn, spontaneously coagulated. After being twice emptied, the walls of the cyst inflamed, and it was rapidly filled with pus and lymph; its wall ulcerated, and the ulceration extending through the adjacent part of the pharynx, the patient was suffocated by the sudden discharge of its contents, and the passage of some of them into the larynx."

It is probable, from the reasons already given, that the cyst in my case opened somewhere about the same spot. Such an occurrence must be very rare.

Brook-street, Nov. 1866.

## LONG-STANDING EMPYEMA, TREATED BY REPEATED TAPPINGS, INJECTIONS, DRAINAGE, AND LASTLY BY REGULAR EVACUATION OF THE PUS.

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G—, aged twenty-nine, a sailor, of naturally sound constitution, was, in August, 1864, admitted into University College Hospital suffering much distress from copious purulent effusion into the left pleura. He was tapped, several pints of pus were evacuated, and the wound immediately closed. He obtained great relief from this tapping; the chest con-

tracted, but the fluid accumulated again. Subsequently he was tapped three times, and on the last occasion a drainage-tube was passed through the chest wall. By the spring of 1865 he had recovered so far that a little thin fluid only escaped from the sinuses. With his chest measuring half an inch less on the diseased than on the healthy side, the patient returned to his work; but in two months, notwithstanding the discharge had never ceased, the fluid collected again, obliging him to return to the hospital. When readmitted the drainage-tube was again passed, but much fluid remained in the chest notwithstanding. Injections of tepid water, astringent solutions, &c., were tried without success. Emaciation and hectic set in, with much pain and irritation in the side caused by the drainage-tube. Various expedients having been tried by the physicians under whose care the patient was during his repeated sojourns in the hospital—Drs. Jenner, Wilson Fox, and Ringer, who have kindly permitted me to make these extracts from their case-books,—I was requested by Dr. Jenner to attempt some plan by which constant evacuation of the cavity could be secured. This was December, 1865. When I first saw him, a stream of foul, stinking pus trickled from three sinuses, in the fifth and sixth interspaces, gushing out when he coughed or moved. He could eat hardly anything, expectorated several ounces of pus daily, was fevered, greatly exhausted from want of food and rest, and apparently beyond recovery. The chest measured one inch more on the diseased than on the healthy side. The fluid could be heard plainly splashing as the patient moved from one position to another. All attempts at injection or evacuation of the fluid had been abandoned from the violent shiverings they produced.

After some delay I persuaded the patient to allow me to pass an elastic catheter through one of the sinuses. By this means I withdrew a few ounces of thick stinking pus; but the fluid soon ceased to flow through the catheter. The next day, the patient being somewhat relieved by the proceedings of the day before, I introduced a straight pewter catheter, selecting this because I could alter the position of its beak should the fluid stop running, as it had done through the flexible catheter. I thus got away 34 oz. of putrid matter. Great relief and no shiver followed this evacuation, while sleep and appetite returned. This treatment was repeated daily for three days, letting off 31 oz., 21 oz., and 21 oz. on these occasions. The next tapping withdrew 16 oz. of pus, perfectly free from odour. His appetite was excellent. The temperature, which until this time had been every night over 100° F., now fell to the natural level. His sputa, no longer purulent, had subsided to a little mucus in the morning. For the next five days the catheter was passed daily, withdrawing from 12 oz. to 16 oz. As he could now sit up, an examination of his chest showed the diseased side was three inches smaller than it had been fourteen days before. The apex of the heart was nearly in its natural position. As the amount of pus continued about the same day after day, I tried if a flexible catheter could not be borne continuously; but, after thirteen hours, the patient was obliged to withdraw it. Next day I returned to the metallic catheter, which was arranged with a valve to prevent regurgitation of air when the pus had escaped, and the instrument was introduced morning and evening. This treatment was pursued for seven weeks, at the end of which time he was strong and hearty, getting away a teaspoonful of matter night and morning by the catheter, which he passed himself with exemplary regularity. He was then discharged from the hospital, with the chest in the following condition:—The circumference of the sound side was only three quarters of an inch greater than that of the affected side. Percussion note of this side was by no means bad, though weaker than that of the healthy side. Respiration was distinct over the whole of the diseased side also.

G— showed himself at the hospital twice in the course of the summer, the last time being on the 21st August. Six months after his discharge he was in excellent health; still getting a little fluid from one of the sinuses by means of his catheter, which he never omitted to pass at bedtime.

This case shows well the great importance of ensuring the regular evacuation of pleuritic purulent collections, and that the value of setons, drainage-tubes, and injections depends upon their accomplishing this. Dr. Goodfellow and Mr. De Morgan in 1859 published two cases somewhat similar to the foregoing, where success attended the drainage-tube worn continuously. Bowditch, in the *Boston Medical Journal* of 1857, and Lacaze du Thiers, in his thesis for 1851, relate instances where recovery or relief was procured in cases of purulent collection just so far as refilling was prevented, and where little benefit

\* *Medico-Chirurgical Transactions*, vol. xxv.

† *Die Angeborenen Cysten-Hydrone*. Giessen, 1843.

resulted from repeated tapplings if the apertures were closed. I may cite also the case of Wendelstadt, himself a physician in active practice, who, after an attack of empyema, daily, for thirteen years, withdrew a small quantity of pus from his chest without detriment to his bodily health.

The readiness with which the viscera regained their normal position, and the lung probably much of its normal volume, during the seven weeks of his convalescence, shows, I think, that permanent collapse and adhesions are very slow to form. In this case the lung had been more or less continually compressed for two years, yet it soon began to expand again when the pressure was removed, notwithstanding the occasional entry of air into the pleura. I was anxious in this instance to attempt to close the cavity in the pleura by exciting inflammation with caustic injection, such as tincture of iodine; but the patient preferred to let well alone, so that opportunity was lost of completing the cure.

This case is narrated to illustrate the great necessity of regularly withdrawing the fluid from the chest in all cases of empyema; moreover, that tapping and closure of the orifice, or even leaving it open for the fluid to drain away itself, is not sufficient. The entry of air is a matter of secondary importance if the pus does not stay long enough in the chest to putrefy; the products of putrefaction, not the atmospheric air, being the noxious influence in these cases. This opinion is borne out by the result of forty-six cases of tapping collected by Lacaze du Thiers, in one of which only did a bad result ensue from the admission of air, and in this instance the matter was retained along with the air in the pleura.

Weymouth-street, Nov. 1866.

## REMARKS

ON

## THE USE OF THE ENDOSCOPE.

By HENRY DICK, B.A., M.D.,

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THERE are some remarks in THE LANCET of October 20th on the use of the endoscope, by Mr. Henry Thompson, which left an impression on my mind, and very likely affected others similarly, that Mr. Thompson is not an admirer of the endoscope, nor very sanguine as to its future usefulness. I can pretty well understand the uncertainty which Mr. Thompson seems to feel on the subject, because I myself gradually passed through the same state of mind.

About fourteen years ago I began to work with the endoscope, and I had several conversations on the subject with the late Mr. Avery. With M. Desormeaux's instrument I did not succeed at first, because I used spirit of wine instead of gazogene. When I used gazogene the light was better. At the same time I found another inconvenience in the great pain which was produced in the urethra by the sharp borders of the tube, but when I used blunter tubes that inconvenience was obviated.

The results of my endoscopic researches nevertheless were not always satisfactory. Sometimes I could very well distinguish the colour of the urethra, and diagnose its condition, but at other times I could not get a good light at the desired spot, except by moving the instrument in different directions; and after many trials I came to the conclusion, that the essential thing for success in endoscopic researches is to get the rays of light well reflected on the spot we are desirous to examine. I therefore prefer Dr. Cruise's instrument to Desormeaux's, not only because the light is more brilliant, but because by his ingenious contrivance we can either raise or depress the tube, or give it a lateral direction. If we succeed in getting the light on the proper spot—even the light of an ordinary sperm candle is sufficient—a distinct view of the object will be obtained by means of the endoscope. A precaution I think it necessary to take is to have the endoscope placed on a stand, the height of which should be capable of alteration, as the involuntary motion of the hand renders the light uncertain. In fact, there are many precautions which it is necessary to observe, the omission of any one of which, though apparently of little moment, is quite sufficient to frustrate the desired result. Amongst them I found it desirable to have tubes constructed, with their side-openings capable of being closed, so that, when required, all the light can be concentrated on one spot, without any loss of light through the side-openings.

I quite coincide with Mr. Thompson's remark about *chronic inflammation* in the bulbous portion of the urethra. That affection was known long before the endoscope was in use; but we were in the dark as to the *extent* of that inflammation. Besides, it is not only the bulbous portion of the urethra which can be affected by chronic inflammation, but also the fossa navicularis can be so affected; and in three cases I found chronic inflammation two inches and a half down the urethra, and which I was only able exactly to diagnose with the aid of the endoscope. The touch alone is not sufficient for the diagnosis, because some parts of the urethra may be very sensitive when no chronic inflammation exists; and I have found, in *old cases* of chronic inflammation, pain in sounding is either absent or very trifling.

The term "granular inflammation" of the urethra does not seem to me one which we ought to accept; my reason for which I have stated in the preface and notes in the second edition of my monograph "On Gleet."

The orifice of a stricture can certainly be seen by the endoscope. It presents itself to the observing eye as a very small black spot; and may be overlooked by a *tyro*, or not found at all, because the end of the tube is directed towards the walls of the urethra. To be successful, we must by a little manoeuvring bring the opening of the stricture into the centre of the tube, as we have sometimes to do with the speculum in order to get a good sight of the opening of the os uteri.

I consider the endoscope a very useful instrument in impassable strictures. In a case of Civiale's, where no instrument could be passed, Desormeaux with the help of the endoscope succeeded. That the orifices of the ejaculatory ducts cannot be seen is to be ascribed to their anatomical position. If we could expand the tube at that particular spot, and dilate that portion of the urethra, I have no doubt the ducts could be seen; but I fear the sudden dilatation of that particular spot would produce orchitis.

In all disease of the bladder, the future of the endoscope is bright, and I am in great hope that the mysterious sac called the "*irritable bladder*," into which so many affections of the bladder have been thrown, and still are thrown, will be well lit up by the endoscope, to the great benefit of humanity and science.

There is not the least doubt that a foreign body can be seen in the bladder by the endoscope. Dr. Cruise has proved it in the presence of witnesses, and Desormeaux further actually gives exact drawings of stones in the bladder, as seen through the endoscope. The "*tactus eruditus*" of Mr. Thompson is certainly necessary; but the *oculorum acies* is still better in the diagnosis of disease. In fact, it is my conviction that the endoscope will be more useful in disease of the bladder than in that of the urethra, because a larger space for observation comes under the range of the instrument, and sooner or later lenses will be constructed to improve its practice and extend its usefulness.

Mr. Thompson's opinion about treating strictures by flexible bougies is very valuable, coming from such an authority; but it does not agree with my own experience, as I have found the metallic bougie more serviceable. But my own experience would be of little weight if it could not be proved that the pathological anatomy of stricture of the urethra shows conclusively that the metallic bougie is the one indicated.

Least I should be misunderstood, I should state that for passing a difficult stricture I prefer the finest and most flexible bougie; but for *treatment* I adhere to my above-mentioned opinion.

The presence of the tube of the endoscope cannot be more irritating than the sound; indeed I have always found it much less so, because the tube only penetrates a short distance into the bladder, and does not come in contact with its walls when in its injected state.

Mr. Thompson is mistaken when he says that we cannot make use of the endoscope in operating in the urethra. Desormeaux cuts strictures with the help of the endoscope, and I have removed a small polypus through its instrumentality; and in cases where only a very small portion of the urethra is affected by chronic inflammation I cauterize by its assistance.

But the last remark of Mr. Thompson about the use of the endoscope in disease of the rectum is very encouraging, and I am sanguine that the time will come when he will discover its equal usefulness in diseases of the bladder and urethra; because it cannot be logically admitted that if the endoscope can reveal a deep-seated affection of the rectum, it should not render equally valuable services in diseases of the urethra and bladder.

November, 1866.