A METHOD OF REMOVING NASO-PHARYNGEAL TUMOURS TO PREVENT BLEEDING FROM THE PEDICLE.¹

By GEORGE STOKER, M.R.C.P.I., M.R.C.S.ENG.,
Physician, London Throat Hospital.

THE removal of naso-pharyngeal tumours is always accompanied with difficulty to the operator, and often with danger to the patient. The difficulties and dangers are produced and increased by the nature of the operation performed and the occurrence of serious bleeding. The bleeding comes from the pedicle or point of attachment of the tumour. Some operations consist in dividing the palate in order to get at the tumour and secure room for manipulating its removal. Other operations consist in removing portions of the superior maxillary bone with a view of reaching the naso-pharynx from the front. Such operations cannot but be regarded as being most serious, and presenting in themselves greater sources of danger to the patient than the removal of the tumour itself, and are therefore, if possible, to be avoided and only undertaken when no other alternative exists. The method I propose, and which I have practised, is an alternative, and I consider it a safe one as it enables one to control bleeding if it occurs. The steps of the operation are as follows:

1. The patient when anaesthetised is placed in the "head down position" either by hanging the head over the end of the couch or by placing a hard thick pillow underneath the patient's shoulders.

2. A strong whipcord is then threaded in the instrument shown in the appended illustration.

3. The loop is passed up the nostril, preferably the larger one, and then brought down into the mouth between the anterior surface of the tumour and the posterior surface of the soft palate, and then passed backwards behind the tumour and pushed right up to the point of attachment of the pedicle by the forefinger of the operator's left hand, whilst traction is made on the cord with the right hand.

4. The whipcord ligature is then twisted tight by means of the handle through which it is threaded, care being taken that it is not twisted so as to cut, but only to compress the pedicle.

5. The wire *écraseur* or galvano *écraseur* is then passed through the other nostril, and pushed up to within about a quarter of an inch of the whipcord ligature.

6. The pedicle is then cut through with the wire, and if bleeding occurs the pedicle can be further compressed by the whipcord ligature as necessity may arise.

7. The whipcord ligature can be left *in situ* as long as necessary, and when removed it must be very gradually loosened, and the left forefinger of the operator passed into the naso-pharynx when this is being done, in order to prevent the ligature slipping off too quickly, as if bleeding begins it may be necessary to recompress the pedicle, and leave the ligature *in situ* till further healing takes place.

This is the exact method I have employed with great success, and I have much confidence in recommending it.

A CASE OF COMPLETE LARYNGECTOMY.¹

By PROFESSOR J. SOLIS COHEN, M.D.,
Philadelphia.

DR. BRYSON DELAVAN showed on behalf of Professor J. Solis Cohen, D. H., aged 48. The history was that a large papilloma of the larynx had been successfully removed by Lefferts in 1876. There was no recurrence for ten years. Then the growth returned. Various methods of intralaryngeal treatment were employed, with unsatisfactory results. In 1891

the patient began to be much worse, and applied for treatment. He was then suffering from great dyspnoea, pain, cough, and dysphagia. The growth had penetrated the larynx externally, and projected externally in a mass larger than an almond. Complete laryngectomy was performed in April, 1892. In the course of the operation, and when the larynx had been partially removed, Dr. Cohen says:

"The epiglottis being healthy, I made an incision through the hyo-epiglottic membrane, and cut the epiglottis square off. The larynx was then tilted forward. Knowing that there has been difficulty in nourishing patients after this operation, I determined to save the entire oesophagus if possible, instead of severing it at the level of the cricoid cartilage, and by careful manipulation I was able to strip the oesophagus and the mucous membrane from the tips of the arytenoid cartilages and larynx down to the base of the first ring of the trachea without perforating it. The larynx, with the first ring of the trachea attached to it, was then severed from the trachea, and the trachea was stitched to the skin in two flaps formed by the sides of the original tracheotomy incision, which had embraced the second and third rings. The soft parts were then brought loosely together with sutures, without any dressing in the pharynx; and a small, soft rubber stomach tube was inserted into the stomach through an opening left in the upper portion of the dressing. This was done, thinking that there might be a necessity to use it for introducing nourishment; but it was found unnecessary, and it did some harm. An hour had been occupied in the whole procedure—anaesthetisation, operation, and dressing. The patient was then put to bed. He was carefully watched. I stayed with him for sixteen hours; and during that time I instructed a number of young men connected with the throat and surgical clinics of the hospital how to take charge of the case. Two members of these staffs were with him constantly for eighty hours. Twice during that time the man would have died had not skilled hands been present to remove mucus from the tracheal tube. It is to the close attention of these young men

The Patient after Operation.

for the first eighty hours, and to the admirable service of our chief surgical resident, Dr. Hager, that this man chiefly owes his life, for the attention after such an operation is far more important in a clinical point of view than the operation itself, all-important as it is. There was a good deal of oozing alongside of the oesophageal tube. On the third night this tube became detached, and we did not reintroduce it. Enemata were used for four or five days, and then gradually food given by the mouth. At each attempt at swallowing a piece of gauze was applied above the tracheal wound, and the parts were pressed close together while the patient swallowed. There was a little trickling for a few days, but this

¹ Read in the Section of Laryngology at the Annual Meeting of the British Medical Association, held in London, July-August, 1895.

ceased. It was interesting to watch the oesophagus during swallowing before the external wound contracted. It was easy to see that the oesophagus opened when the man took water. There has been some doubt whether there is a mechanical distension of the mouth of the oesophagus in gluttony, or whether there is some such action of the oesophagus itself. In this case it certainly did open to receive the water. The man has made an uninterrupted recovery. There has been no attempt made to use a voice tube."

Dr. BRYSON DELAVAN said: Let me call your attention to several points of interest which this case illustrates. The man breathes freely with the aid of a tube. He is able to phonate with sufficient power and volume as to be heard distinctly at a considerable distance. He can even sing, although the latter expression must not be understood as meaning too much. He swallows both liquids and solids with ease, and can perform the act of smoking. He is not subject to any troubles of the bronchial tract, and he enjoys good health, although unable to do any kind of hard work. In the course of the operation the external integument was slightly inverted, with the result that several hair follicles were included. From these a number of hairs have grown, and their presence in the inside of the pharynx has been so annoying that it has been necessary from time to time to remove them. The special advantages of the operation have already been alluded to. They are admirably exemplified in this case, and it is chiefly on account of them that I have brought him from the United States to exhibit him to you.

A CASE OF DISLOCATION OF THE FEMUR ON TO THE PUBES, FRACTURE OF THE NECK, AND REMOVAL OF THE HEAD OF THE BONE.

By GEORGE J. W. FLOWER,
Honorary Surgeon to the Yeovil Hospital.

I was called on the evening of July 4th to see A. H., aged 48, who had been under my care for eight or nine years, suffering from locomotor ataxy. He had managed to get about fairly well with the aid of a stick, but on this particular occasion, in stepping off the pavement to allow some people to pass, had fallen and dislocated his hip, the head of the femur being forced on to the pubes. All immediate attempts at manipulating the bone into place having failed, I asked one of my colleagues to visit the patient with me, for the purpose of administering ether, and otherwise rendering me assistance. The anæsthetic having been given, manipulation was recommenced; when suddenly, as the limb was being rotated, the head of the bone separated with a snap from the shaft, which then assumed its proper axis, leaving the head of the bone under the femoral vessels, so that the femoral artery could be felt pulsating over it. The limb immediately presented a dusky—I might almost say purple—hue, from venous congestion, and became cold. It was obvious that the only possible course was to cut down upon and remove the head of the bone; and this was accordingly done by means of an incision of about 5 inches in length, and just to the outer side of the vessels. The anterior crural nerve and the femoral vessels were turned aside, and the head of the bone (see illustrations) was removed with the lion forceps. The incision was closed with chromic gut sutures, dressed with iodoform and double cyanide gauze, and a Desault's splint applied. The wound healed by first intention, and at the end of three weeks I put on a plaster spica, and allowed the patient to get up and walk on crutches. He did remarkably well, the shortening is very slight, certainly not more than an inch or an inch and a-half.

I reported the case and showed the patient at the meeting of the Dorset and Hants Branch on October 10th, 1894, on account of its several peculiarities. A dislocation on to the pubes is rare in itself, but the question as to whether in this instance the neck of the bone was partially fractured by the accident and completely broken by the rotation, or whether the

disease from which the patient suffered had made the bone so friable that it could be fractured by simple rotation, remains undecided. Then, again, the fact of the head of the bone having been left under the femoral vessels and obstructing the circulation of the part constitutes, I think, an accident which has not been hitherto reported. I may say that the bone had the appearance of undergoing some form of degeneration, the layer of compact tissue being remarkably thin.

In support of the theory that the bone was rendered friable by disease and fractured by the rotation, it may be said that in locomotor ataxy the bones have a tendency to atrophic changes, and Dr. Charcot, in 1868, described a peculiar form of disease resembling osteo-arthritis with absence of pain, and often great deformity as occurring in the ataxic, and at the same time mentioned this tendency to atrophy of bone and liability to fracture.

The accompanying illustrations show the naked-eye appearance of the fragment and the plane of its separation from the shaft.

October 24th, 1895.—It is interesting to note that now, fifteen months after the accident and operation, the patient walks as well, if not better, than he did before it happened.

MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

A CASE OF DIPHTHERIA TREATED BY ANTITOXIN. The following notes seem to us to be worthy of publication whilst the antitoxic treatment is on its trial.

G. K., aged 8 years, daughter of Dr. Kirk, was found on August 26th, 1895, suffering from a sore throat and enlargement of the submaxillary glands, a high temperature, and a thickly furrowed tongue. Dr. Kirk at once swabbed out the throat with a strong solution of nitrate of silver, which caused the membrane to separate and to be removed, but it was readily reformed. The following day the throat was swabbed out with liq. ferri perchloridi and glycerine twice a day, and the patient given a saline mixture and 5 grains of antipyrin on the night of August 26th. She took fluid nourishment well.

Mr. Berry saw her on the morning of August 29th. The tongue was thickly coated, and on the right tonsil there was a sloughy patch the size of a sixpence, and a second one behind it the size of a pea, with a good deal of tenacious mucus in the naso-pharynx, but the posterior wall of the pharynx appeared free; the application of the iron and glycerine had apparently removed the membrane. The temperature was 102.8° F. It was decided that the antitoxin treatment should be employed, and Dr. Peck, the medical officer of health to the Ormskirk Rural Sanitary Authority, kindly came over in the evening and gave her a dose of antitoxin by injection in the cellular tissue near to the inferior angle of the scapula.

On August 30th Mr. Berry saw her again. She had passed a restless night, but slept towards morning. The mucus in the throat was less tenacious, and she had vomited a quantity