course of the disease, along with other symptoms; and it also happens that in these same cases convulsions are in a varying degree common, particularly, of course, in epilepsy itself; and it is suggested that this lesion may be the cause or manifest

Fig. A.—Nerve cells of motor region from a case of epilepsy with dementia. $\times 350$.

sign of the same condition in myxœdema, and thus, perhaps, account for some at least of the mental, motor, and sensory phenomena of this disease.

There seems every reason to believe that this peculiar condition of nerve cell is eminently a disease of the nutrition of

Fig. B.—Nerve cells of motor region from a case of myxœdema. $\times 350$.

the cell; and there can be little doubt that its presence is in a high degree inimical to the functional well-being of any given cell, inasmuch as its steady disintegration and destruction in many cases can be traced from the commencing vacuole in the nucleus; this in itself would appear to be sufficient to account for a certain portion of the nervous symptoms which occur so prominently in myxœdema.

It is not suggested for one moment that this is either more or less than the record of a pathological condition observed in a single case of myxœdema; and I would hope to have further opportunities of examining the brains of patients suffering from this disease, by the same method. Cases of myxœdema, however, are scarcely sufficiently common to be certain of this, and therefore I publish early, in the hope that other observers who may have this opportunity may possibly be able

to decide the position which this pathological condition may occupy in relation to the nervous symptoms in myxœdema.

Fig. C.—Nerve cells of motor region from a normal healthy brain. $\times 350$.

THYROTOMY IN CHILDHOOD FOR THE REMOVAL OF LARYNGEAL GROWTHS.

By P. H. MULES, M.D.,

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THE treatment of laryngeal growths is a special subject rather than one of general surgical interest, yet no surgeon should be unprepared to attack a condition which must, from its nature, prove of serious or even rapidly fatal import, and this is the reason why I have sought space to place on record such details of the operation of thyrotomy as I have found useful, and are not present in surgical textbooks.

The special manipulative skill required to remove growths by the intralaryngeal methods can only be attained by the constant practice of throat surgery, but when the case has passed into the domain of general surgery by requiring an operation through the skin and cartilages, then it has to be treated on well recognised lines, requiring only such manipulative skill as it is in the power of general surgeons to acquire.

It may be accepted that no growths removable by intralaryngeal operation should be subjected to extralaryngeal attack, but when it has been definitely decided that a growth is present and cannot be removed by intralaryngeal operation, it is for further consideration whether the urgency of the symptoms demand that the growth should be removed at once, or whether tracheotomy should be performed as a tentative operation, in the hope that the quiescent state of the larynx, or its altered conditions, may induce its recession. A preliminary tracheotomy is undoubtedly of great benefit, and, if successful, not only restores the tone and condition of the child, but palpably reduces the risk of thyrotomy by allowing the surgeon to select his own time for the major operation, as well as showing him the recuperative power of his patient.

The time allowed to elapse between the tracheotomy and major operation must be governed by various circumstances—primarily, the increase or otherwise of the growth, as well as the condition of the patient. With an increasing growth, the sooner it is removed the better. With a stationary growth, means for its absorption may be fully and freely tried, notably arsenic in full doses. With a receding growth, time must be given to perfect the cure.

Having decided that the growth is to be removed by thyrotomy, and a tracheotomy having been performed some weeks previously, the child is to be anæsthetised through the tube, chloroform being preferable. An oxy-hydrogen lamp—in this climate a necessity—is to be ready at the call of the operator, as well as a small concave mirror and an object lens of 4" focus to reflect and concentrate light on various points. A fine small piece of Turkey sponge threaded with silk, to plug the trachea down to the tracheotomy tube, is preferable to Trendelenburg's tube, as it leaves no clot; both may be used if desired, but Trendelenburg's tube is difficult to insert through a small tracheal opening, and is not necessary. Four or five pieces of sponge, cut square and also threaded, to plug the larynx and arrest the oozing during removal of the growths; a small electric cautery, such as is used for the cornea; and cutting laryngeal forceps complete the list of extra appliances.

After the child has become unconscious, the head is to be well drawn back over a wine bottle filled with warm water and covered with flannel. An incision through the soft parts is to be made exactly in the median line, so as to expose the thyroid cartilage—which in the child is very small—care being taken that the skin wound is long enough to give easy access to the deeper parts; cut with a sharp scalpel through the thyroid cartilage, from the notch down to two rings of the trachea. It would be well to avoid entire section of the cartilage; but the size of the larynx—no larger than a hazel nut—makes it impossible to explore the interior unless the cartilage is divided. Introduce the retractors and plug the trachea down to the tube with the soft sponge already prepared.

Next remove each growth separately with the cutting forceps, and plug the larynx from time to time as required to arrest the oozing, and touch each bleeding point with the cautery. After all the growths have been removed and the plug drawn out, unite the cut cartilages by one suture of fine silver wire through the centre of the cut edges to remain permanently, and the soft parts by four or more passed through the inner edges of the sterno-mastoid, the deep fascia, and skin, to be removed on the third day; dust with iodoform, and dress with sal-alembroth gauze; place the child in a tent bed, and treat as after tracheotomy. The case, if it does well, requires only the simplest dressing.

Such was the treatment adopted in the case of a fragile female child, aged 4 years, from whom were removed twenty-five separate papillomata which had completely blocked the larynx, and who made an excellent and rapid recovery, running about the ward on the tenth day.

The prognosis in these cases must be doubtful, time alone determining the success or otherwise of the operation.

In conclusion, I would urge the necessity of sufficient skilled assistants. I was fortunate in having the assistance of my colleagues, and we all felt that no man would be justified in attempting such an operation short-handed.

ALCOHOLISM AND TUBERCULOSIS.

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FROM the histories given by patients, and from the evidence afforded by *post-mortem* examinations, the conclusion has been forced upon me that tubercle is more common among the alcoholic than is generally believed. I have collected from the *post-mortem* records of St. Thomas's Hospital for the past thirteen years 75 fatal cases of tuberculosis in which there was a strong history of alcoholism; in only 10 of these was there any history of phthisis in the family; in 46, or in over 60 per cent., the liver was cirrhotic. These cases by no means include all the intemperate who died with tubercle. In a considerable additional number of other cases of tuberculosis there was a strong suspicion of alcoholism. All doubtful cases, however, have been purposely omitted. In 4 cases tubercle affected the peritoneum alone, in 1 case the pleura alone, and in 3 cases the peritoneum and pleura alone. In the remaining 67 cases the lungs were affected; in 47 of the latter there were vomice; in many of these the vomice were

small and multiple, it being rather the exception to find a case of considerable excavation. In 29 there was broncho-pneumonic consolidation; in 12 there was increase of connective tissue; in 43 there was grey tubercle present; in 19 there was caseous tubercle, the two varieties being both present in 11 cases. There was also tuberculous ulceration of the intestines in 21, of the larynx in 13, tubercle of the pleura in 5, tubercle of the peritoneum in 12, of the meninges in 5, of the kidneys in 8, of the spleen in 4.

It may be concluded from these facts that the commoner type of alcoholic phthisis is a combination of excavation with broncho-pneumonic consolidation, and that there is usually a considerable deposit of grey tubercle present in the lung. The fibroid change is the rarer form, occurring in only 12 out of 67 cases. In a large proportion there was tubercle present in other organs. The peritoneum was affected in a total of 19 cases. Fifty-nine of the cases were males, 16 were females, a ratio of about 4 to 1.

As regards the ages of these patients, they were in 12 cases over 20 years of age and under 30, 25 cases over 30 and under 40, 25 cases over 40 and under 50, 7 cases between 50 and 60, and 5 between 60 and 70. In the remaining case the age was 73. The reason for the number of cases being greater in middle life than in early adult life is probably because alcoholism is more frequent at that period than at an earlier one, and also because the longer the habit is indulged in the more susceptible the patient becomes.

The duration of symptoms in the 29 cases uncomplicated with cirrhosis was doubtful in 13, six months or less in 13, sixteen months, eighteen months, and three years respectively in the remainder, giving an average duration much below the average.

My experience among out-patients at the Brompton Hospital is that a considerable proportion of the phthisical—especially of the men—have been alcoholic, and I should say that a history of alcoholism is a very common antecedent in those cases where there is no inherited susceptibility to tubercle. As regards women, it is impossible to say to what extent alcohol is responsible for the disease, it being very uncommon for a woman to own to alcoholic habits.

In alcoholic cases the condition of the patient is generally worse than would be expected from the amount of disease revealed by physical examination. It is therefore specially important in such cases, when there are any chest symptoms, to examine the sputum for bacilli. By this means I have been able to make an early diagnosis of phthisis when the examination of the chest was negative. In alcoholic cases I have found that the progress of the disease, as a rule, is rapid and the prognosis particularly unfavourable.

The belief that, as regards people of any age, alcoholic drinks in excess act as a preventive of tubercle, I consider not only not borne out by experience, but altogether contrary to it. Without *post-mortem* examinations conclusions as to the absence of tubercle are fallacious and of no practical value.

INSANITY IN PARIS.—From a report recently issued by Dr. Paul Garnier, medical officer to the special infirmary attached to the Paris Prefecture of Police, it appears that the number of cases of insanity registered there in 1888 was 4,449—as against 3,080 in 1872, being an increase of about 30 per cent., or nearly one-third. The total number of insane persons known to the authorities in the French capital from 1872 to 1888 inclusive was 62,572, of whom 34,882 were men, and 27,770 women.

A JAPANESE MEDICAL SOCIETY.—The Sei-I-Kwai, or Society for the Advancement of Medical Science in Japan, held its annual meeting at Tokio on October 7th. The secretary's report showed that in the twelve months from October 1st, 1890, to September 30th, 1891, there had been an increase of 30 in the membership of the Society. The Tokio Medical Library at present contains 831 Japanese and 1,829 English books, besides 2,755 volumes of Japanese and foreign journals. Mr. Kanehiro Takaki, F.R.C.S. Eng., L.R.C.P. Lond., Director-General of the Medical Department of the Japanese Navy, was re-elected President, and Dr. W. N. Whitney, Physician to the United States Legation, Y. Saneyoshi, and T. Matsuyama, Vice-Presidents for the ensuing year.