the time by my friend, Mr. Walsh, of this city, who had attended the patient; and from these I cite the following account. James Connor, aged 56, was a man of temperate habits, and one who, through life, had enjoyed good health and spirits, until within two years of his death. At this period, he became involved in pecuniary difficulties, and hereupon became low-spirited and somewhat unsocial. He continued to follow his business, however, as usual. Two months before his death, he embarked the remains of a small capital in some speculative undertaking, which issued in complete and immediate failure; a circumstance which very seriously aggravated his mental depression. A fortnight after this catastrophe, he was seized with slight paralysis of one arm, which, however, disappeared spontaneously in about a week. It returned in a few days with increased severity, hemiplegia, indeed, shewing itself. The affection, to some extent, involved both sensation and motion; and there was also, inability to articulate with any distinctness. "At this time," says Mr. Walsh, "I was sent for. I found his general health not bad. Though both motion and sensation were affected considerably, neither were abolished; the tongue appeared to be the most affected, especially when efforts were made to converse. There was some impairment of vision, but the pupil showed no change. His intelligence was undisturbed, and but little enfeebled. *His emotional excitability was remarkable, the most trifling circumstance being sufficient to provoke it. When I visited him, he was literally overjoyed; and, when I took my leave, he would grasp my hand and burst into tears.* At my last visit, twenty-six hours before his death, there was but little change in his general condition, except that he was weaker; still he was able to be up and out of bed. When I left him on this occasion, the emotion displayed was truly distressing. He rested badly the ensuing night, moaning much at intervals; next morning, he became drowsy, and towards noon was slightly convulsed. He expired at 6 P.M., Nov. 18th, 1853. On examining the head, eighteen hours after death, the vessels of the scalp were empty; the sub-cutaneous tissue was pallid; the membranes of the brain were healthy, the vessels unloaded, and the sinuses empty; the superior aspect of the cerebrum was natural, the convolutions a little flattened probably. On raising up the whole encephalon, a considerable quantity of serum slightly tinged with blood was found at the base. The consistence of the cerebral substance was good, and on slicing it very few *puncta vasculosa* were observable. Fluid, similar to that discovered at the base, occupied the ventricles also, and in considerable quantity. The choroid plexuses were not congested; but, *over the right corpus striatum, there ramified several large vessels. On cutting into this structure, the grey colour was found deepened, and blood flowed from a number of points,* forming in these respects a striking contrast to its fellow on the opposite side, as indeed to all the rest of the encephalon. The cerebellum was quite natural."

The following communication with which I have been kindly favoured by Dr. Fripp, of London, comprises particulars of a case very analogous to the one just related:—"A gentleman intimately known to me, one who possessed considerably more than ordinary powers of mind and attainments, and one whose strength of purpose and firmness were among his most distinguishing characteristics, was seized, without previous warning, with forgetfulness of words, in the midst of a very active career involving ceaseless occupation of mind and body. Perfect quietude and gentle medication very speedily succeeded in restoring this failure, and he appeared well again. But it was impossible to restrain his ardent desire for activity by the most explicit announcement of what this symptom in all probability indicated. In about two months, sudden and complete confusion of memory occurred, producing the strangest jumbling together of true and false that I remember ever to have witnessed. This was followed by partial paralysis of the left arm and facial muscles: and, at the same time, *great emotional excitability shewed itself.* It is worthy of remark that apart from the affection of memory of recent events—which itself underwent considerable improvement—there was no impairment of intellect to be recognised. His conversation upon abstract topics and on whatever appealed chiefly to the reasoning powers was as clear and forcible as ever: and his quiet indomitableness of will shewed itself repeatedly in many characteristic ways. Yet he was at this very time, and whilst the memory was improving, *moved to tears—a thing quite strange to him—by the slightest occasion of feeling, even by a kind word, and the sight of a friend.* After some considerable apparent amendment, and on account of reapplication to various objects of former interest and occupation, which it surprises me now to think of as possible in such a condition, he suddenly became apoplectic, and died within ten months of the very first intimation of disease.

"Besides evidence of some meningo-cephalitis on the surface chiefly on the right side, the main result of the *post mortem* inspection was the disclosure of a large mass of dirty grey softened cerebral substance in the central part of the right hemisphere on a level with the corpus callosum, and principally over the posterior part of the corpus striatum. *This portion of the corpus striatum was itself softened, and as though corroded,* and liquefied matter filled the descending corner of the corresponding lateral ventricle. The thalamus was sound; and also every other part of the encephalon appeared to be, after a most searching examination.

"What struck me as a point of connexion between this case and your views of the function of different parts of the encephalon, was, I need hardly say, the prominent development during its progress of emotional excitability, and the damaged corpus striatum, with perfect integrity of the meso-cephale, apparent after death. But to enable you to judge more fairly how far this connexion deserves to be regarded as essential, I have briefly stated all the other leading particulars of the case."

Certain nations are characterised more than others by emotional sensibility; the Irish, for example, more than the Scotch. Women are, in this respect, more remarkable than men. It would be interesting to compare the relative development of the optic thalami and corpora striata in the respective instances.

Emotional sensibility produces its own reactions upon the muscular system, independently of the movements denominated consensual. A cheerful countenance, with a light elastic step, denotes a pleasurable feeling; whilst a sorrowful, anxious look, with heavy tread and measured gait, indicates painful and depressed emotion.

In certain morbid states, emotional sensibility will react upon muscles that are paralysed to volition and sensory impressions. In laughter and weeping, facial paralysis becomes disguised, sometimes, for the moment.

Probably the most striking and conspicuous phenomenon, consensual as ordinarily occurring, is formed by the *ejaculatio seminis.* But I had, some years ago, a patient—a gentleman in good general health, and in the meridian of life—in whom there was impotence of erection and insensibility to the allied local impression; yet, under the influence of emotion—in attempted *coitus*—the seminal effusion would take place.

Such facts, I conceive, corroborate the view which I have taken, that sensation and emotion have separate and distinct centres in the encephalon.

ON THE PATHOLOGY AND TREATMENT OF LARYNGO-TRACHEAL INFLAMMATION.

By ROBERT TURNER, M.D.

[*Continued from page 591.*]

THE bearing of these pathological speculations on the *therapeutics* of laryngo-tracheal inflammation may next be considered. Their general tendency undoubtedly is to inculcate promptitude and diligence in the use of remedial measures, as the sole conditions on which success is attainable. We possess resources by which, if employed energetically at the onset of the disease, the *fons et origo mali* may be directly combated, and the speedy arrestment of

the malady often procured; but if this be permitted to reach an advanced stage unchecked by treatment, the morbid conditions existing from the first will be so much increased in severity, and so many new sources of danger will have been added, as to present an array of obstacles to recovery against which it is utterly hopeless to contend.

A general, and the leading curative indication will of course be *to overcome the glottidean contraction*. In acute cases, this must be attempted not alone by means calculated to subdue the inflammatory condition on which the contraction depends, for, in many instances, life would be extinguished before our object could be attained in this way; but we must also endeavour to procure the immediate and prolonged suspension of the perverted reflex action, in order to gain sufficient time for the removal of its exciting cause. If we cannot first *palliate*, we shall often fail in our efforts to *cure*. It is found, accordingly, that the remedies of greatest utility in these circumstances are those which can subserve both ends; blood-letting (general and local), tartarised antimony, and the warm bath, being relaxants as well as antiphlogistics; and I believe that, but for the co-operation of these agents, in virtue of their first named property, the remedial action of calomel, although a medicine of undoubted efficacy in the radical treatment of the diseases under consideration, would often come too late.

A complete examination of the *methodus medendi* in these diseases does not fall within the scope of the present communication, but a few cursory remarks on the subject may be permitted me.

In common with many practitioners of experience, I have been led to form a very high opinion of the value of tartarised antimony as a therapeutic agent in every form of laryngo-tracheal inflammation. In one variety (croup), it is regarded by some as the chief remedy—an estimate to which both theory and observation induce me to assent. I have found that its remedial influence is here best obtained by exhibiting it at first in a dose sufficient to induce free vomiting, and afterwards, whilst nothing occurs in the state of the patient to contra-indicate its use, in smaller doses, at intervals of an hour or two hours, so as to keep up its nauseating action more or less decidedly, in proportion to the severity of the symptoms, until a palpable impression has been made on the state of the respiration. The proposal made within the last few years, to employ in the treatment of croup, as a substitute for this invaluable appliance, the sulphate of copper, a non-nauseating emetic, and therefore devoid of the very quality which confers on medicines of this class their chief remedial value in the disease, is one not likely to find favour in the eyes of the practical physician. Its *primâ facie* absurdity will justify him in dismissing it without a trial.

Admitting the efficacy of early and free venesection, which, apart from its own remedial tendency, will be of service in promoting the action of the tartar-emetic, in acute laryngo-tracheal inflammation affecting the adult, I am yet of opinion that, in the topical abstraction of blood, we possess a measure more generally applicable, and of still greater utility. In croup, I have long restricted my practice to this last mode of depletion. Along with the diminished doses of the antimonial, I exhibit calomel, combining with this, when it is judged expedient to discontinue the other, the compound powder of ipecacuan. Thus guarded and aided, the mercurial is pushed to the extent of inducing its constitutional action, should any degree of stridulous breathing or cough remain; and true exacerbations, if such arise, are met by a recurrence to the use of the nauseant whilst it can be borne.

In all severe cases which have not yielded in some measure to other treatment within the first few hours from the commencement of the attack, I have recourse to counter-irritation along the sides of the larynx and trachea; and I believe no better method of effecting this has yet been devised than the application of the emplastrum cantharidis, succeeded, before complete vesication has taken place, by a warm poultice.

I have made some trials of the inunction over the larynx of belladonna, as an auxiliary to the more powerful relaxants; but, with these at the same time in operation, I have been unable to determine whether it had any share in bringing about a cure, when that was the result. It is, at all events, an expedient which can in no way interfere with the other treatment, and may perhaps have its use.

It has occurred to me that benefit might be derived from the cautious administration of the enema tabaci (other means failing), in such a case of extreme urgency in the adult as that related below (Case II); but, since the idea was formed, no suitable opportunity of carrying it out has presented itself.

There is yet another method of directly attacking the glottidean contraction—a recent, and, in my estimation, a most precious addition to the *armamentarium medicum*, applicable to all forms and stages of laryngo-tracheal inflammation. I refer to the mode of "swabbing" the larynx with a strong solution of the nitrate of silver, lately introduced, or at least brought prominently under the notice of the profession, by Dr. Horace Green of New York. The immediate power which it often very strikingly manifests over affections of this class can scarcely be derived from its astringent or caustic action on the mucous membrane alone; but, whatever its *modus operandi*, the value of this agent will be acknowledged by every one who has fairly tested it. The alacrity with which even very young subjects submit to the application, after their original dread of it has been overcome, is of itself a proof of the efficacy of this remedy. I am by no means satisfied that the *swab* can be so easily introduced into the larynx as Dr. Green and others assert. At least, I suspect I have myself but seldom if ever succeeded in passing it completely within the rima glottidis; but I believe that, if it be firmly pressed against this orifice just when the patient begins to inspire, the tongue being at the same time depressed to the utmost, we shall be enabled to apply the solution sufficiently over the mucous surface to secure its remedial action. From a want of attention to these precautions, and of readiness to seize the favourable moment, especially with children, the operator may, as I think I have more than once witnessed, carry the sponge over the entrance to the respiratory organs, and introduce it into the œsophagus instead.

Moist air, at a temperature of above 70° Fahr., I have not found to answer the expectations I was led to form from it. Since its introduction, by Dr. Golding Bird, as a remedy in diseases of the respiratory organs, I have tried it on many occasions, but have never been able to trace any part of my success in treatment to its agency. Its employment in private practice is at all times difficult and inconvenient, often utterly impossible.

When the advance of the disease towards a fatal issue threatens to outrun our endeavours to unlock the glottidean constriction, time for the fulfilment of this indication may be gained by *admitting air to the lungs through an artificial channel*. Considerable diversity of opinion prevails respecting the most eligible situation for the operation of bronchotomy, or the comparative merits of laryngotomy and tracheotomy—a question into which it is not my intention to enter, further than to state that, as an expedient in all cases of laryngo-tracheal inflammation, I give a decided preference to the last named proceeding, it being more remote than the other from the seat of disease, and because its performance does not, like this, involve the necessity of dividing, to a greater or less extent, the cartilages of the larynx. I begin the incision into the tube immediately below the cricoid cartilage, and extend it as far down the trachea as is necessary to permit the insertion of a canula of adequate size. The alleged greater difficulty of this operation than that of cutting into the crico-thyroid space ought not, I think, to weigh against its obvious advantages; and if the cricoid cartilage be fixed and drawn forward by means of a blunt hook applied to its inferior border, whilst an assistant steadily holds asunder the edges of the preliminary incision through the integuments and between the muscles, the last step of the operation will be

rendered sufficiently easy of accomplishment in the hands of a surgeon of ordinary dexterity.

The pathological views above adduced will further tend to impress upon the practitioner's mind the expediency of adopting this measure early in the disease, giving additional force to the observation of Louis, that, "as long as bronchotomy is considered an extreme measure *(un dernier ressort)*, it will be always performed too late." The period of the attack at which the indication for its employment will arise must vary in the different forms, as well as in individual instances of the same form, of the malady. I have met with cases in which an attack of croup, preceding and retarding the eruptive stage of some of the exanthemata, continued for four, five, or even six days, without perceptible abatement of the laryngeal symptoms, but in which, notwithstanding, there was no necessity for surgical interference; and I have also seen examples of the same subacute and unyielding condition, similar or even greater in duration in the diphtheritic variety of this affection, where operative procedure was equally uncalled for. On the other hand, circumstances will present themselves, and an illustration in point is supplied in Case II, under which an hour's delay would be fatal. I therefore believe that the practitioner who follows any general precept in this matter, whether it inculcate a delay to operate of six* or of thirty† hours, or who accepts any other guidance than that of "the unwritten tact" which is the priceless offspring of experience and attentive observation, will oftener be led astray than directed aright.

In a large majority of instances, I venture to affirm, the failure of medical treatment, without its surgical auxiliary, may be foreseen before the disease has advanced too far to admit of the operation being had recourse to with a prospect of success; and if an unexpected recovery does now and then occur, under the use of what may be called the ordinary curative measures alone, such exceptional cases can obviously have no weight in determining the rule of practice.

Over and above the *indirect* remedial tendency of bronchotomy, I regard the first stage of this proceeding as a remedy proper in laryngo-tracheal inflammation, exerting its beneficial influence in two ways. The dissection of the integuments and muscles from the tube, to the necessary extent, cannot be accomplished without dividing some of the branches of the thyroid arteries in their course to the interior, and thereby diminishing the supply of blood to the seat of constriction. A condition unfavourable to the persistence of that constriction is thus established, and a very direct local depletion at the same time practised, calculated to lessen inflammatory action. These objects will probably be still more effectually served, if the incision be made to reach from the lower edge of the thyroid cartilage to the isthmus of the thyroid gland, and if the organ be freely denuded of the soft parts covering it to the same extent, especially at the situation of the crico-thyroid membrane. In the case of diphtherite, of which a report is subjoined (Case II), a marked abatement of stridulous respiration, which the foregoing considerations may explain, almost immediately followed the completion of the preliminary steps of the operation. After reflection, in fact, has inclined me to doubt whether opening the tube itself might not have here been dispensed with. In similar circumstances, I should not again complete this measure until admonished of the necessity of doing so by a recurrence of the dyspnœa.

The value of this operation in laryngo-tracheal inflammations attacking the adult is acknowledged on all hands, but, where infantile affections of the same class are concerned, the case, it need scarcely be said, is widely different. Tracheotomy, as an expedient in every form of croup, is almost universally tabooed in this country, all our leading authorities taking part in the process, with more or less energy. Whether this unconditional rejection of it be merited or justifiable, will form the subject of inquiry in the succeeding part of this communication.

[*To be continued.*]

Keith, July 1854.

* Dr. Ferriar, "Medical Histories and Reflections", vol. iii, p. 203.

† Dr. Baillie, "Trans. for the Improvement of Med. and Chir. Knowledge", vol. iii, p. 275,—as quoted in Cooper's "Surgical Dictionary". Sixth edition, p. 253.

A CASE OF ABDOMINAL ANEURISM: WITH REMARKS UPON ITS DIFFERENTIAL DIAGNOSIS.

By C. M. DURRANT, M.D., Physician to the East Suffolk and Ipswich Hospital.

[*Read at the Annual Meeting of the Suffolk Branch, on June 23rd*, 1854.]

OF the previous history of the case of ventral aneurism which I am about briefly to detail, I know but little. The patient was a fine, well-formed man, a sergeant-major in the East Suffolk Militia; and, at the time of my seeing him, was under the conjoint care of his regimental surgeon, Mr. Sawer, and Mr. Sampson of Ipswich.

It appears that he had suffered from pain in his back for about thirteen months; and the regiment having been ordered about this time to wear the shell-jacket instead of the coat, he, perhaps not unnaturally, although of course erroneously, ascribed his symptoms and subsequent illness, in part at least to this cause.

From that period he had, I believe, suffered more or less pain, although it was not sufficient to prevent him fulfilling the harassing and fatiguing duties of the late encampment at Landguard Fort. The pain, both in the back and right hypochondrium, extending down to the groin and thigh, became latterly most agonising; and nothing but almost constant narcotism from morphia tended to afford the slightest mitigation. I am not aware when the pulsation in the abdomen was first discovered; but, as an interesting feature in connexion with the autopsy, may be mentioned, that during the last week of his existence, all pulsation had nearly ceased. He sank gradually; but the pain, at times excruciating, continued to the end.

EXAMINATION OF THE BODY. The body was emaciated; and on opening the abdomen, a large mass could be felt, extending from a little below the diaphragm downwards into the right iliac region. On closer examination, an aneurismal sac of the size of a large orange, and filled with firm fibrin, was found to spring from the aorta, about two inches below the diaphragm. This sac had evidently gradually given way; as a still larger tumour, containing semi-organised coagulum, was found within the folds of the mesentery, which, indeed, had formed its sac, and which, on tracing it upwards, was seen to proceed from the original aneurismal pouch. On examining the vertebral canal, the bodies of two of the dorsal were almost entirely removed by absorption.

REMARKS. The diagnosis of ventral aneurism is sometimes obscure. It is ordinarily characterised by the existence of a pulsating tumour of variable extent in the course of the abdominal aorta. To the hand, the sensation afforded is that of a fixed, rounded, more or less compressible mass, giving a full, swelling, expansive, as well as heaving pulsation, and sometimes accompanied by a purring tremor. The chief impulse is generally to the left of the spine, but not always, as the sac occasionally enlarges only to the right side, where alone the impulse is then felt. The force of the shock received by the hand is often quite out of proportion to the size of the aneurismal sac, while in other instances we may have a large sac unaccompanied by either impulse or murmur. The size of the tumour may generally be defined by careful percussion, but this is not always practicable, as the limit is sometimes obscured by flatulent distension of the intestines.

On applying the stethoscope, we may hear an abrupt, short, moderately loud, and deeply seated systolic bellows murmur less harsh and grating than in thoracic aneurism, and which is sometimes more marked in the left lumbar region than