

has been established. (*Vide* Case 1.) The patient should be in a well-ventilated room, the head gently raised with pillows, and everything is to be avoided which may produce any bodily irritation or mental excitement. An elastic tube is to be introduced through the nostril, and, if the patient does not greatly object, should be allowed to remain in the œsophagus. Although it may at first produce some inconvenience, the patient will generally become accustomed to its presence. When the tube is passed, it should be quickly carried along the floor of the right nostril, and the finger of the left hand introduced, either through the mouth or wound, to guide its extremity into the pharynx. This is very important; for I have frequently seen the surgeon well-nigh foiled in his repeated attempts to introduce the instrument, in consequence of its hitching against, or passing into the aperture of, the glottis, which it will be liable to do, if not properly directed by the finger of the operator. The distress has been so great that every resistance has been offered to its employment. Much of the comfort to be derived from our treatment depends upon its use. All attempts at deglutition, and even speaking, are to be avoided, that these extremely moveable parts may be kept as tranquil as possible. Every loose portion of cartilage or other tissue should be carefully removed, on account of the irritation and inconvenience produced. I have seen it necessary to take away the epiglottis, when nearly separated from its connexions. A case came under the care of Mr. Coote, in November, 1839, where, in an injury inflicted in a suicidal attempt, the arytenoid cartilage, and upper edge of one side of the thyroid, which had been detached, came out through the wound, together with the greater part of the corresponding thyro-arytenoideus-lateralis muscle. Sir Charles Bell relates an instance in which one of the arytenoid cartilages was divided, and a portion of it vibrated in the chink of the glottis; it acted as a foreign body, and produced suffocation.

The lightest and simplest dressings will be found best adapted to these cases: water-dressing, with fine linen or muslin—occasionally a light poultice placed over the latter. The wound should be constantly cleansed; and if very extensive, and in the neighbourhood of the glottis, the introduction and frequent renewal of soft portions of sponge will be found very useful in absorbing the purulent discharge which might otherwise flow into the larynx. The only nourishment allowed for some time should be fluids.

The individual who has thus attempted suicide should be carefully watched; for the melancholy and deplorable condition in which he is placed urges him to resort to every possible means to accomplish his end; and the strictest restraint, during the treatment, is sometimes absolutely necessary, to prevent the infliction of further injury. Great advantage is derived from the administration of opium and other narcotics, introduced by the œsophagus tube, or by means of enemata.

With regard to other internal remedies, these will be few and simple, in the absence of cerebral and general febrile excitement, which, if present, must be combated by suitable treatment; and the great depression, both mental and physical, often supervening upon the cessation of the inflammatory symptoms, will demand the judicious employment of stimuli. Local and general bleeding, antimony, and mercurials, must be had recourse to, in the event of inflammation of the lining membrane of the air-passages and lungs, so often productive of the most serious consequences in these cases, and the first symptoms of which we should endeavour to meet and subdue.

In Case 3, it will be remembered that it was necessary to introduce a tube through the glottis, in consequence of the œdematous state of the mucous membrane—a plan suggested and adopted by Mr. Liston in spontaneous œdema of this passage. In those cases where the patients have gone on favourably for some time, and have afterwards been attacked with dyspnœa, in consequence of excrescences or granulations encroaching upon the air-tubes, we must agree with Sir Charles Bell in the propriety of performing tracheotomy.

In general, we may augur favourably of superficial wounds of the throat. When deep, their danger diminishes in proportion as they are remote from the aperture of the glottis. Thus, wounds entering the mouth above the os hyoides, or dividing the larynx below the glottis—i. e., through the lower part of the thyroid cartilage, or between it and the cricoid, will (as also wounds of the trachea, generally) do well; but, for reasons above mentioned, we should pronounce very unfavourably of a case where the incision has extended through the thyro-hyoid membrane, through the centre or upper part of the thyroid cartilage, or in any other direction towards the rima-glottidis, by which that part is exposed or injured. I have seen only one case of the kind do well, and

that was not very severe: two fingers only could be admitted through the incised thyro-hyoid membrane towards the epiglottis, which was slightly injured.* Still, however, a great deal of comfort may be derived from proper treatment, and the chances of a favourable termination may thereby be much augmented. These wounds, from the great surface exposed, are extremely tedious in healing—a process which must take place almost wholly by granulations; and it has been shown that the patient must not be considered safe for a considerable time after the healing of the external wound.

In concluding these observations, I will take the opportunity of relating a case, which may be considered interesting also in a medico-legal point of view, as exhibiting the almost incredible extent of injury that may be inflicted by the determined suicide:—

James T—, aged fifty, was admitted into St. Bartholomew's Hospital, suffering from erysipelas of the head. Although he was observed to act rather strangely, yet there were no suspicions of his being mentally deranged. One evening, taking a razor with him, he retired to the water-closet, where he was found, after cutting his throat in a most determined manner. He was covered with blood, and died almost instantly. In the front of the neck, the razor had divided a small portion of the left mastoid muscle, the left external jugular vein, and thyro-hyoid muscle down to the thyroid cartilage, which had resisted his efforts; but the mischief was greatest at the posterior part of the neck; the whole of the extensor muscles were divided; the occipital arteries were also cut, and the connexions of the occiput with the atlas, and those of the latter with the vertebra dentata, were destroyed. The theca vertebralis was opened, and the instrument had made a slight wound in the medulla oblongata, opposite to the junction of the vertebræ atlas and dentata. A considerable quantity of blood was effused into the theca. On opening the heart, the blood which it contained was found in a fluid state. The brain exhibited nothing very remarkable in its substance. The arachnoid was opaque in many points; the veins of the pia mater, which was emphysematous, contained a number of bubbles of air.

Crescent, New Bridge-street, Blackfriars, August, 1846.

REPORT OF AN INSTANCE OF PERFORATION OF THE STOMACH, PERITONITIS, ENTERITIS, AND DEATH.

By WALTER YATES, Esq., Surgeon, Nottingham.

ELIZA S—, aged twenty-one, is a stout and rather short individual, of a pale and strumous disposition of body. During the whole period of her life she has been the subject of bad health. When a child she was much afflicted with intestinal irritation, the consequence of the generation and development of worms. As she became a woman, symptoms of dyspepsia began to assail, and continued to increase upon her, up to the period of her death, which took place early on the morning of the 5th March. All along she has had to bear with the greatest difficulties; she has been ill-clad and ill-fed; she traces all her former and present maladies and troubles to having been the inheritor of misery and want, and the child of "poverty, hunger, and dirt."

For some time she has been in the habit of sleeping on a cold plaster floor, a mere shadow of a bed intervening, with very slight over-covering. Her diet has been composed chiefly of tea, with an occasional taste of meat; in short, her earnings have been little, her luxuries less, or none at all, and her necessaries scanty in the extreme.

At an early hour this morning she awoke with a considerable degree of smarting and burning in the region of the stomach, and with excessive pain in the bowels. She was

* My friend, Mr. Stafford, kindly favoured me with the important particulars of a remarkable case of recovery from a severe wound in this situation, and which he has since recorded in vol. xxiii. of the *Med. Chir. Trans.* The wound, already very extensive, was still further enlarged into the pharynx, in the middle of the second night after his admission into the St. Marylebone Infirmary, by means of an old blunt knife that the patient had concealed during the momentary absence of the nurse.

An interesting account of a deep penetrating wound into the larynx, five inches in extent, at the upper part of the thyroid cartilage, exposing the chordæ vocales and rima glottidis, is given by Mr. Key, in some excellent clinical observations upon the subject, delivered at Guy's Hospital, July 9th, 1829, and reported in vol. iv. of the *Medical Gazette*. Ten days had elapsed since the infliction of the wound, and the patient was considered, notwithstanding many untoward symptoms, to be going on extremely well. Mr. Key has, however, informed me that it proved fatal. "The opening never closed, nor, indeed, was there an attempt to close it by granulations. He sank, in three or four months, from subacute inflammation of the lungs. A cast was taken of him after death, which is now in the Museum: it conveys a good idea of the nature and extent of the wound."

restless during the greater part of the night, and experienced greater thirst than usual, with other symptoms of a feverish condition of the frame. Her mother rose, made her some tea, and fomented her bowels. Shortly afterwards, she began to feel sick, and in a little while longer she vomited. The matter thus ejected was a fluid, and in appearance not unlike coffee; it contained no solid matter whatever. The nausea, vomiting, and pain being in no way abated after a lapse of some hours, she requested my attendance. She is pale and shivering; her teeth are chattering loudly; she is in a state of extreme collapse; the pulse at the wrist is scarcely perceptible as regards its force and strength, and in number it is much below the standard; the tongue is pale, pasty, and tremulous; the abdomen is very painful; she points to the left side, on a line with the umbilicus outwards, as being the most so; she can bear the weight of the bed-clothes; the legs and thighs are not much drawn up; pressure by the fingers, when slight, augments the pain; when increased, and continued, it appears to be somewhat diminished (a very remarkable thing, since it proved to be a desperate case of peritonitis;) the bowels have not been moved during the last two days; the urine is scanty and high-coloured. Ordered, chloride of mercury, three grains; powdered opium, one grain. Mix for a pill, to be taken immediately, and repeated in two hours if necessary. Let her have a little warm brandy-and-water, warm tea, and more clothing. The abdomen to be fomented with hot water and flannels. Let her have also an enema of a pint and a half of warm gruel.—Evening: She is no better; she has not recovered from the collapse; the pulse is still feeble, and the skin is hardly warm; the sickness continues; the belly has become tenser, tympanitic, and not at all less painful. By some mismanagement, the enema was not administered. Her present condition does not admit of blood-letting. Ordered, a large blister to the stomach. Tincture of opium, forty minims; compound tincture of cardamoms, a drachm; peppermint water, an ounce and a half. Mix for a draught, to be taken immediately. Spirit of nitric ether, half a drachm; tincture of opium, two drachms; sulphate of magnesia, half an ounce; water, half a pint. Mix. An ounce to be taken every third hour.

March 4th.—Has passed a dreadful night; the pain has become more acute, less intermitting, and far more general; the surface of the body has acquired a little warmth; she suffers much from headach; the tongue is rather dry, rough, and white; the pulse is more feeble and more frequent; her breathing is quicker, and is performed with more labour; there is greater moisture and pallor of the face; the urine is very scanty; it is passed with considerable pain; bowels still unmoved; the least motion of the body now aggravates her suffering beyond measure; there is no difference in the appearance of the belly, save that the blister seems to be acting properly. Ordered a bleeding, and the enema to be repeated. Chloride of mercury, two grains; powdered opium, half a grain. Mix for a pill, to be taken every third hour. Six ounces of blood is the whole amount that can be obtained by every method that can be put in operation. She begins to feel very faint, and continues to vomit as usual. At present she feels in no degree relieved by the bleeding.—Mid-day: Constant vomiting still continues; she seems, if anything, to be still paler about the face, which is bedewed with cool moisture. The headach remains as it was; the pulse is more rapid, and decidedly weaker; it shows sinking, and partakes of that peculiar character which it had on my first visit; the abdominal pain and tension are rather on the increase; bowels not open since the attack commenced. The emollient enema had no soothing effect whatever, nor did it cause any evacuation of the bowels. Let her have a warm poultice applied to the belly: she is to continue in the use of the same agents, with an occasional draught of warm brandy-and-tea, in small quantities.—Evening: She is much worse in every way, and is evidently sinking; the countenance is assuming a deathlike appearance; the pulsations at the wrist are almost imperceptible, they cannot be numbered; she is not thoroughly sensible to what is going on around her; she has passed a small quantity of urine since mid-day, but has had no stool at all within the last three days. The blood which was drawn presents a very slight buff; the proportion of clot is anything but great, nor can we expect that it should be, taking into account the manner in which she has lived, the scanty and almost fluid diet on which she has subsisted, and the general anæmic condition of the subject. She died in the night, between twelve and one o'clock.

Post-mortem examination, sixteen hours after death.—Body very pale and waxy; death rigidity not present. On cutting into the abdominal cavity, with the view of exposing the

thoracic-abdominal viscera, a great escape of gas took place, in odour like sulphuretted hydrogen.—*Lungs* crepitate under the pressure of the fingers, and throughout their whole texture they appear to be perfectly healthy, except, perhaps, that they are slightly congested.—*Heart* healthy in its valvular structure, very pale, and not so firm as usual in its general structure; the right cavities are filled with dark fluid blood; the left heart contains a large, though by no means a firm, clot of fibrin, occupying both its auricle and ventricle.—*Liver* partakes of the general paleness, but is not at all affected in its internal organization; the peritonæum, however, on its lower surface, is faced with a thin layer of lymph, of a cheesy consistence.—*Stomach* is adherent to the liver at its lesser curvature, immediately to the left of its pyloric extremity, say within an inch thereof. It exhibits reddish-coloured patches in several places, more the result of venous congestion than of extravasation. In one particular spot, moreover, is to be seen the primary cause of all the after mischief. Exactly at the part where the stomach is adherent to the under surface of the liver, an ulceration,—and, to all appearance, of considerable standing,—has taken place, subsequently, and of course more recently, to which, complete perforation of the remaining coats of the organ. This portion of the stomach I cut out, and carefully separated from the liver. The opening is beautifully sealed up by a portion of lymph, somewhat resembling a thin bit of soft wash-leather. The dimensions of the opening are these:—A sixpence will just lie in the cavity of the mucous surface, and a common quill will with ease pass through the opening in the muscular and peritonæal coats.—*Abdomen*: The entire surface of the peritonæum is covered with cream-like lymph, as is also that other portion of peritonæum which envelops the smaller and larger intestines; there is no appearance of inflammatory action in the interior of the intestinal canal, but, outwardly, the serous coat, when freed from the adhering exudation, presents a very red surface, no doubt from vascular injection of the subserous cellular tissue. The intestines do not contain an ordinary quantum of feculent matter. The other abdominal viscera—the spleen, the pancreas, and the kidneys—exhibit nothing unusual. There is very little urine in the bladder.

Remarks.—In this case, as in all others to which the functional or organic changes of the chyle-making organs may be referred, we find, for the most part, the presence of a pretty regular and successive train of symptoms; and as in lifetime we have many changes,—life being the essence itself of constant change,—these changes being the harbingers of health, and such changes only as Nature destined to be; for men die now of a ripe and good old age.

“ ——— Last scene of all,
That ends this strange eventful history,
Is second childishness, and mere oblivion;
Sans teeth, sans eyes, sans taste, sans everything.”

So also, in the progress of disease, do we see a satellite variety of changes occurring. First comes a peculiar irritability of the stomach, and often an extension of that irritability along the whole alimentary canal, and even into the recesses of the liver, of the pancreas, and of the spleen,—in short, all along the gastro-enteric division of mucous surface. The mere existence of this condition of so important a membrane as the one under consideration must, at the same time, indicate a functional derangement of the several viscera of which it is a component part—such an one as directly or indirectly affects every tissue throughout the entire body, as well vascular as nervous, osseous as membranaceous. For, in the history of disease, and more especially of the affections of such organs as are purposed to change the food, and to convert it, in an incipient state, into chyle, and eventually into blood itself, we must bear in mind the extreme necessity of a healthy state of those particular agents which must perform effectually these several and successive acts. The very fluids secreted from this vast surface of membrane, when irritated or inflamed, become altogether altered in character and condition; so that those chemical changes, that precipitation, those decompositions and combinations, which should be continually going on throughout the whole alimentary canal, become completely and thoroughly perverted.

A perversion of an acting agent, vital or otherwise, necessarily implies a malgeneration of its product, as instanced by a vitiation of the chyle from deranged digestive machinery.

A fibro-albuminous and an exceedingly nutritious fluid in health, is carried into the blood by an apparatus of lacteals and chyle-ducts. Man's sojourn upon the earth's surface depends, in the first instance, entirely upon the perfect elaboration of this natural, nutritious, and prepared aliment, (the chyle.)

Another fluid, (lymph,)—in its composition not unlike chyle, and therefore in its qualities likewise nutritious,—is also conveyed into the same vital current through the medium of lymphatics, absorbents, or lymph-ducts. Both these fluids are destined to be carried into the blood, there to make up the losses constantly going on in the exhaustion or expenditure of its more solid and fluid materials. They both, however, become more or less transformed, according to the extent of the various changes going on in the mucous secretory apparatus belonging to the whole chyle-making organs—the one fluid (chyle) becoming so changed, directly, either from a redundancy, a deficiency, or derangement of the juices or secretions proper to the several organs concerned; the other (lymph), indirectly so, from an imperfect, and consequently a morbid, nutrition of the body generally. And as from a bad quality, either of the acting agent,—the gastroenteric fluids,—or of the agent to be acted upon,—the food,—good or perfect chyle cannot be formed, so from a bad condition of the blood, lymph, in its true and undisguised shape, cannot be elaborated, lymph being the more nourishing portion of the effete or waste material of the system, taken up, in the first place, by the lymphatics, to be afterwards mixed with the chyle in one instance, and with venous blood in a second instance; last of all, however, it is poured into, commingles with, and forms a part of, the vital fluid itself; not like a poison, indeed, but like a true, vivifying, and vital agent.

Supposing, then, the mucous surface to be in the condition lately mentioned, it matters not whether the secretions therefrom be diminished or augmented in quantity, or whether they be perverted in constitution; for if either the one or the other irregularity exist, there cannot be a healthy production of material or food for the blood, seeing that the agents whereby this particular food is produced are not in a state fit for its formation.

Let us view, then, for one moment only, a vitiation, an increase, or a diminution, of the biliary flow, for instance, upon the body. Why, with this new and unnatural compound, we must of necessity have new and unnatural changes and products transformed. As a general rule, the same thing takes place, though to a different extent, when the pancreatic secretion becomes to be morbidly affected, as when the gastro-intestinal or hepatic juices happen to be constitutionally or quantitatively altered.

These, then, are conditions which in themselves are merely functional. Too often, however, this kind of cases takes an onward progress, as in the instance under consideration, where we have following, inflammatory action, terminating in ulceration, and subsequent and complete perforation, of the various coats of the stomach. Having gone thus far, it becomes a matter of some moment, and of no little interest—first, from the rarity of the case, and secondly, from the very uncommon termination of a slow organic disorder of the stomach, since, out of more than four hundred post-mortem examinations at which I have been present, and assisted, this is the only instance of perforation of the three successive coats (the mucous, muscular, and peritoneal) of the viscus falling under my observation. I have seen, however, amongst this number, several cases of slight ulceration or abrasion of the mucous surface; some few of a mixed cancerous and tubercular affection of the stomach; and numerous cases of ulceration, and not a few of complete perforation, of the intestines; but never before have I witnessed an example like the one under question.

There is one point more, in connexion with diseases of the stomach, whether functional or otherwise, but for the most part functional, which I should like to mention in this place: it is a family peculiarity, carried, perhaps, to greater extremes than all other relational peculiarities, insanity alone excepted. I have observed, over and over again, individual persons derived from a common stock affected with symptoms referrible, chiefly and primarily, to the stomach. The similarity of symptoms and of sensations have, however, more forcibly presented themselves to my notice than has any other part of the history of gastric disorder. The preference, moreover, given by different members of the same family to a certain kind of food is not a little remarkable. This peculiarity in the system and in the stomach alters as age advances, but, for the most part, the similarity exists only at a given age.

Lastly, however different individuals derived from the same parents may be in form or features, in bulk or stature, and in other things, there seems to be a sameness in respect to the stomach, and to (at least) the functional derangements of that organ; because, generally speaking, they have a common structural formation to begin with, and during a great and a principal part of their existence, (the time of growth,) they

partake of a common diet, they feel in common, and experience a like gastric derangement. As life goes on, they acquire new tastes; the old ones, in some measure, disappear, still in rotation. Frequently, they suffer from the same ailments; and again it is their ill luck to experience the ill effects of a deranged digestive apparatus, and the horrors of organic change. "Last scene of all" is death, but not, as in the other case, the sequel of a goodly and mature old age, since, in the deadly struggle, the stronger conquers; for

"Here, all waste, all desolate, is laid;
Even the ruin'd ruins are decay'd!"

Nottingham, March, 1846.

CONTRIBUTIONS

TO

THE PRACTICE OF MIDWIFERY.

By J. HALL DAVIS, M.D.,

PHYSICIAN TO THE ROYAL MATERNITY CHARITY; LECTURER ON MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN.

LABOURS TERMINATED BY INSTRUMENTAL DELIVERY, WITH ILLUSTRATIVE CASES, AND REMARKS.

A transverse presentation, (elbow,) with funis; turning being impracticable, after the exhibition of a full dose of opium, delivery was effected by the crotchets.—Remarks.

Mrs. —, aged twenty, a private patient, in labour of her second child, her first (now living) having been delivered by the forceps. The waters had escaped a quarter of an hour before my arrival, the mouth of the womb being at the time nearly fully dilated. The elbow and funis presented; there was very feeble pulse in the cord. The patient had a moist skin, of natural temperature; and the pulse was but little raised above its natural rhythm. The vagina was amply moist. I essayed, very gently and gradually passing my hand up into the uterus, to turn; but powerful uterine contraction was at once induced, which returned in full force against me each time I attempted to proceed. I administered one drachm of laudanum, and waited patiently until it had had time to act, and then repeated my efforts, but without effect. The cord had now ceased entirely to pulsate. I accordingly proceeded to deliver by the crotchets. I perforated the chest in the axilla, divided the ribs most accessible, obtained a purchase on the body by the guarded crotchets, and so brought the child through the passage. The body came sideways, the breech and feet being first extruded as in a case of "spontaneous evolution." The uterus contracted properly; the placenta was thrown off within half an hour, and removed from the vagina, by the party who had consulted me; and the patient was left, earnestly expressing her gratitude. Pulse 90, its beat quick.

Visit on the following day.—Pulse 80, and soft; skin moist, and of natural temperature; lochia good. The patient had passed water without difficulty, and was in no pain. Her convalescence was uninterrupted, and she was enabled to go out in the usual time.

Remarks.—In this case the uterine action, and that of the accessory powers, were such as to render turning impracticable, even after the exhibition of the remedy (opium), which frequently enables us, by diminishing the violence of the womb's contractions, to complete the operation. The practice of bloodletting had recourse to in some cases, with occasional success in quelling excessive uterine action, would have been improper here; the patient's constitutional strength was not such as to indicate or warrant its adoption. It was seen, that I was not here obliged to decapitate, nor to remove the arm, as in the case which I communicated in *THE LANCET* for Aug. 7. The child here was not so large; and merely diminishing the bulk of its body by compression with the guarded crotchets, insufficient in that case, was adequate to my object in this.

Twin delivery; first child came easily; the second was arrested by the prolapse of the hand by the side of its head.

I was called, in July, last year, by a medical friend, to a private patient, aged twenty-three, who had been delivered at five P.M., after an easy and natural labour, of the first of two children, of which she had been pregnant. At six P.M. the head of the second child had descended into the cavity of the pelvis; but unfortunately with the hand by the side of it, which my friend had not been successful in replacing. Pains continued in sufficient force, but without any further progress, and at half-past nine P.M. I was sent for. The pains were yet