called; this is a most insidious, dangerous, complication, and often admits of no other resource than laryngotomy: 4th, the difficulty of deglutition is an inconvenience which the patient may experience as a consequence of the operation; and which is easily explained upon anatomical principles; but this, as well as the difficulty of respiration, generally disappears during the progress towards cicatrization.

Such are the principal circumstances to be considered with respect to the amputation of the lower jaw, which I have now performed about eighteen or twenty times. One patient only was affected with severe inflammation of the base of the tongue, and with angina œdematosa—he died; in two other cases, the cancer, which appeared to have been radically removed, reappeared after several years, and destroyed the patients; but, with respect to the others, the operation has been attended with the most complete success; and in all, the two fragments of the jaw-bone have been united by a firm callus.

Disarticulations of the Lower Jaw.

Hitherto, Gentlemen, we have spoken only of the removal of the body of the lower jaw-bone; but we may conceive how the same diseases may attack different parts of the jaw, and thus compel surgeons to have recourse to a more bold operation. Accordingly the bone has been divided, and with success, close to its branches; nay, the bone has been disarticulated on one side, and removed as far as the chin. This operation has been performed three times by MOTT, of Philadelphia; three times, in 1825, by M. CUSACK, surgeon to one of the Dublin hospitals; once by M. GENSOUL, at Lyons; once or twice by GRAEFE, of Berlin; and once, in 1829, at *La Pitié*; making in all ten cases of disarticulation of the lower jaw-bone, practised with a variety of success.

But the boldness of surgeons did not stop here; it is reported (*Archives Générales*, tom. 14) that WALTHER, and after him GRAEFE (*Jour. Hebdom.*, tom. 4), have removed the whole of the lower maxillary bone, by disarticulating it on both sides; WALTHER had previously tied both carotid arteries: these facts appear almost incredible, and it is difficult to imagine how the patient could survive such formidable operations. However this may be, it is clear that the different situations and progress of the disease must modify, in a variety of ways, the method of practising this operation; but they may all be classed under the five following heads:—

1st. Removal of the middle portion of the body of the bone. 2nd. Removal of all

its horizontal portion.* 3rd. Removal of one-half of the horizontal portion. 4th. Disarticulation and removal of half the bone. 5th. Disarticulation and removal of the whole lower maxillary bone. For the method of performing these different operations, I must refer you to the different surgical works in which they are described at length.

ON THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF THE DIFFERENT VARIETIES OF ABDOMINAL AFFECTIONS WHICH OCCUR DURING THE PUERPERAL STATE.

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THE object of the present paper is not so much to bring forward any new facts respecting the different abdominal affections which occur during the puerperal state, as to arrange them under distinct heads, in order that the junior practitioner may be assisted in his diagnosis, and relieved, in some degree, from that perplexity which must, at the onset of his career, tend to embarrass his mind with regard to the true nature of these disorders. Much of the obscurity and contrariety of opinion in which this subject is involved, depends upon the practice which has so long prevailed, of classing diseases essentially differing in their nature, and, consequently, requiring a very different treatment, under the same common name. There is scarcely any affection occurring during the puerperal state attended with abdominal pain, which has not been designated puerperal fever; and as the plans laid down by different writers for the cure of this disease are directly at variance with each other, it surely becomes a matter of serious importance for the practitioner to be accurate in his diagnosis, in order that he may put into practice the method most likely to prove successful in these dangerous affections; and when the fearful rapidity with which some of them run their course is considered, the necessity of having clear views of the disease, at its commencement, will be sufficiently apparent. Some of them are distinctly and decidedly inflammatory;

* These two methods were first introduced into surgery by Baron Dupuytren.

there is increased action, and there is a corresponding degree of power; in other words, there is common acute inflammation going on in some internal part of the belly, which is, in most instances, easily and certainly cured; in fact, there is no more difficulty in subduing it than there is at other times. Others, again, are attended with a great degree of increased action, but there is a diminution or decline of power; the distinction is highly important in a curative point of view, as the remedy which may be considered as the sheet-anchor for the relief of one of these varieties would most inevitably hasten the fatal result if employed in the other. It is not the author's intention to refer to the opinions of those who have preceded him, but simply and shortly to enumerate the different forms of abdominal disease which he has witnessed in the superintendence of an extensive obstetric charity.

Spasm of the Uterus.—This effect generally takes place soon after the expulsion of the placenta, and from the distress with which it is attended, considerable anxiety is felt by the patient, the attendants, and, in some instances, by the accoucheur himself, if he has not had an opportunity of seeing these cases previously. Females labouring under uterine spasm will occasionally be found tossing about the bed in great agony, and will describe the pain as being much more intense than the last throes of labour. It is of a darting kind, shooting through the pelvis to the back. On placing the hand upon the abdomen, the uterus will be felt through it, appearing to be of an almost stony hardness; this hardness is sometimes partial, at others more general, depending upon the extent of uterus affected.

A moderate and equable degree of pressure does not increase the inconvenience, but if the examination be rudely conducted, pain will be experienced. This circumstance, together with the undisturbed state of the general circulation (for the pulse is little if at all accelerated), will enable the accoucheur to distinguish it from an inflammatory condition of the parts. The affection appears to be allied in its nature to after-pains, though much more intense in its degree. It is to be relieved by opium given in large doses: a dram of laudanum may be exhibited in a little peppermint-water, which should be repeated in half an hour should the symptoms require it. One single large dose will be found much more efficacious than many small ones, and two of them seldom fail to procure ease, after which the patient usually goes on well. One case of this kind has been mentioned to the

author, in which the accoucheur most unwisely introduced his hand into the cavity of the uterus in search of clots, but a single small one only was extracted, of a very insufficient size to account for the symptoms.

Inflammation of the Womb.—The uterus is not unfrequently the subject of inflammation after delivery, which commonly occurs within the first few days. It is ushered in by a chill, more or less distinct, quickly followed by re-action, the pulse becoming more quick than ordinary, and the heat accompanied with hardness. There is frequently nausea or vomiting. Considerable pain in the region of the uterus is experienced, accompanied with a bearing-down sensation. There is uneasiness and difficulty in passing the urine, which feels hot and is secreted in small quantities, and there is often a distressing sensation of tenesmus. The lochial discharge is invariably diminished in quantity, and occasionally altered in quality. The lacteal secretion is also lessened in the milder cases, and in the more severe may be altogether suppressed. The womb can be felt to be decidedly enlarged, and if the hand be firmly pressed upon the abdominal coverings, it causes an increase of pain. The pain experienced in this disease extends to the upper and inner part of the thighs.

Inflammation of the uterus may be distinguished from inflammation of the peritoneum by the patient being enabled to bear a certain degree of pressure without flinching, and by the pain, although never absent, being subject to violent occasional exacerbations. If, however, the disease has existed for some time, the inflammation will extend to the peritoneum, and in severe cases there will be the usual symptoms of peritonitis added to those just mentioned. It is to be distinguished from after-pains, by there being no absolute freedom from pain, by the general febrile disturbance, and by the symptoms being aggravated if the hand be applied upon the abdomen with sufficient firmness to press upon the uterus itself. It is well known that after-pains are frequently relieved by patients grasping the uterus firmly with both hands.

The treatment of uterine inflammation is very simple; the antiphlogistic plan should be pursued, its extent proportioned to the intensity and severity of the disease. Blood should be taken from the arm, and in the severer forms it may be necessary to repeat the bleeding. The long-continued application of warm fomentations is attended with great advantage. The internal treatment consists in

first emptying the bowels by a very mild laxative, and afterwards in the administration of small but frequently repeated doses of calomel and opium. A very favourable symptom in this disease is the appearance of discharge, whether lochial or sanguineous, and the greater the quantity the more relief will be experienced. It is scarcely necessary to state that very little nourishment should be allowed, but the patient may be plentifully supplied with diluent drinks. A dose of opium given in sufficient quantity to procure sleep is also beneficial.

Inflammation of the round Ligament.—The round ligament of the uterus is at all times exceedingly vascular, and during the period of gestation the vessels are much enlarged, and a greater quantity of blood than usual is determined to it, and is, thence, particularly liable to inflammation. Where the disease is confined to this ligament, it is very easily subdued. Pain is experienced in the groin, increased by pressure, and by the movements of the lower limbs: sometimes a little fulness can be felt through the integuments; the uneasiness is described by the patient as of a peculiar dragging kind; the general circulation suffers but little, nor are the secretions affected unless the disease be unusually severe. The treatment required is very simple: from twelve to eighteen leeches should be applied immediately over the affected part, and a bread-and-water poultice placed upon the orifices when the leeches fall off. The constitution being so slightly affected, general remedies are not ordinarily required: if the bowels be confined, a smart purgative should be administered; an opiate may also be given at bedtime, and the patient is frequently relieved in the space of twenty-four hours. This disease is readily distinguished from other inflammatory affections by the locality of the pain, and by the little general constitutional disturbance excited by it.

Inflammation of the Peritoneum.—This disease is met with much more frequently than any other abdominal affection to which a woman in child-bed is subject. It usually makes its appearance within four days after delivery, though not necessarily so, as it sometimes commences much later. The patient experiences a chill, varying greatly however in intensity, which is soon followed by re-action; the pulse becomes more frequent, but seldom rises much beyond 100 beats in the minute for the first few hours. It is sometimes full and round, very much resembling that of a patient threatened with apoplexy, but more commonly it is contracted and hard. Extreme tenderness of the abdomen is an

early and prominent symptom, increased by the slightest pressure, and where the attack is severe the patient will almost invariably be found in that position which subjects the inflamed membrane to the least degree of such inconvenience, viz. upon the back, with her legs bent upwards towards the abdomen; this posture not only puts the peritoneum off the stretch, but it also in some degree prevents the bed-clothes from lying upon the body, the weight of which in many instances cannot be borne without occasioning a great increase of pain. The tongue is white and dry, the lips parched, and there is considerable thirst. Dryness and heat of skin are also among the early symptoms. The lacteal, lochial, and urinary secretions are greatly diminished, and in some instances the two former are entirely suppressed.

Inflammation of the peritoneum is distinguished from other internal inflammations by the seat of the pain, by the patient's being unable to bear the least weight upon the abdomen, and by the general and high febrile commotion which is excited in the system.

The treatment of acute inflammation of the peritoneal membrane, when put into practice in the early stages of the disease, is eminently successful. If the practitioner be called in at its commencement, he ought scarcely ever to lose a patient. The writer does not recollect more than one case in his own practice which ended fatally, where the symptoms were decidedly and unequivocally those of acute inflammation of this membrane; and in that solitary instance he ascertained after the patient's decease that the attendants had most improperly given stimulating food and drink in considerable quantities, so that the result could not with fairness be ascribed to a failure of the remedies.—Blood-letting freely employed is the *sine qua non* for the cure of this disease; it should be used *early* and *freely*: the first bleeding should be a large one; in fact the arm should not be tied up until actual delirium supervenes; or at any rate until there be a near approach to it; (with some persons it is not an easy matter to produce actual fainting;) twenty or thirty leeches should instantly be applied to the abdomen, and the bleeding afterwards encouraged by the renewed application of warmth and moisture, which also acts beneficially as a local fomentation. The best mode of accomplishing this object is to scald some camomile flowers, with which a large flannel bag is to be filled. It is then to be laid over the bowels, a fresh one being in readiness, so that it may be replaced as often as it gets cool.

This method is much preferable to the

use of a bread poultice, which has been frequently recommended, from the camomile bag being so much lighter, and, consequently, producing less uneasiness than a heavy poultice.—The internal treatment is very simple; in a very large majority of cases nothing is required except *calomel* and *opium*. The first dose should be a large one, viz. five grains of the former with three of the latter. The writer has had very frequent opportunities of witnessing the delightful effects of large doses of opium given upon the principle so ably explained by the late Dr. Armstrong, viz. of keeping down that hurry of circulation which so frequently follows the abstraction of large quantities of blood, and which it is so desirable to avoid in all inflammatory affections. The bleeding, general and local, and the exhibition of the dose first recommended, constitute the whole treatment necessary at the first visit. It is better not to interfere with the bowels, unless there has been previous costiveness, when a large common enema may be administered; under other circumstances this may be dispensed with, it being an object to keep the parts within the abdomen as quiet as possible.

The practitioner should pay his second visit within three hours at the farthest, when, if it be a mild case, he will probably have the satisfaction to find his patient asleep, the pulse diminished in frequency, and the pain much less severe. If, however, there be any considerable pain remaining, although the symptoms are, upon the whole, favourable, venesection to faintness should be again had recourse to, and three grains of *calomel* with two grains of *opium* administered. If the disease have been attacked at the very onset, it will seldom be necessary to bleed from the arm more than twice, although it may be prudent, if the symptoms do not readily yield, to reapply the leeches. The same internal remedies should be continued in smaller doses, until the mouth be slightly affected. The author believes many relapses have resulted from discontinuing the medicines before this effect has been produced. He believes also that active purgatives ought not to be employed during any stage of the disease, but a mild laxative may be given with advantage so soon as ptyalism occurs, such, for example, as half an ounce of castor oil. Such is the simple treatment required for the cure of acute peritonitis; which, although in itself a disease of great danger, is one, than which none of the various disorders which are attacking the human frame, yield more readily to the proper remedies, provided they be early brought to bear upon it.

Puerperal Fever.—This is a disease of a most malignant nature, which occasionally prevails as an epidemic; it is attended with an inordinate hurry and powerless state of the circulation, the patient's energies seeming, as it were, suddenly and completely prostrated.

The disease begins with rigor, more or less distinct, in some cases lasting for a considerable time, in others it is trifling and scarcely noticed. On the subsidence of the chill, there are heat and flushing of the face, attended with great pain in the head. A very rapid rise of the pulse takes place; it is frequently found beating at the rate of 140, or even more, in the minute, soon after the subsidence of the chill, and has a very peculiar powerless throb, conveying to the finger a sensation as if the artery was but half full of blood. The abdominal pain is often at first circumscribed, and confined principally to the region of the uterus, extending, however, as the disease advances. There is a difference in the state of the skin, being sometimes hot, but generally moist, and not unfrequently covered with profuse perspiration, this latter symptom, however, giving no relief. The lacteal and lochial secretions are at first unaltered, and may remain so for some time, although the latter generally becomes changed either in quantity or quality, or both, and the former is suppressed. The tongue at the commencement is not much, if at all, altered from its healthy character, but soon becomes covered with a thick brown fur, and at last puts on that dry glossy appearance which is witnessed at the termination of other fevers, when combined with abdominal affection.

In the worst forms of this terrific disease, the abdomen soon begins to feel tense, and at length increases to a size much greater than it was before delivery. This enlargement depends principally upon an accumulation of gas within the intestinal canal, although doubtless it is partly produced by a large effusion of fluid within the peritoneal sac. When this swelling has taken place to any considerable extent, patients scarcely ever recover. The pain in the belly increases, the pulse becomes more rapid, the lochial discharge either suppressed or very offensive in its nature, the teeth are covered with sordes, and the tongue in many instances nearly black; colliquative diarrhœa comes on, the feces and urine also passing involuntarily, and at length the patient's sufferings are terminated by death.

It would far exceed the limits of the present paper to enter into a consideration of the diverse opinions entertained by medical men respecting its nature; but

the author begs to express his conviction, that Dr. Lowder, who lectured on midwifery upwards of thirty years since, entertained very correct views when he said, that "the inflammation was erysipelatous, and the fever typhoid." From what the author has observed, he cannot help believing that the fever is of the most virulent kind, and that the abdominal inflammation should be looked upon as a most unfortunate combination with the fever, rather than its cause; in the same manner as typhus fever may exist in conjunction with inflammation of the chest, bowels, or any other part. In support of this opinion two cases may be related which occurred in the London and Southwark Midwifery Institution some years since, in which the morbid appearances were chiefly observed in the thoracic cavity, a large effusion having taken place from the surface of the pleura, precisely resembling in its character that which always is present in the abdomen when the peritoneum is affected. There is one opinion which it seems necessary should not be passed unnoticed, viz., that the essential cause of puerperal fever is, inflammation of the uterine veins, terminating in the formation of pus within their tubes. That in the dissection of these patients, a purulent secretion has often been found within these veins, it would be presumptuous to deny, or to disbelieve the facts, being attested by names of very sufficient authority. The writer's experience, however, clearly proves to him, that this fever may exist with all its malignancy and all its intensity, *without such venous affection*, and, consequently, that it is not an essential ingredient in the formation of the disease. In the epidemic of 1829, he did not observe it in one single instance, although nearly every patient was examined after death, and in one of those inspections he was kindly assisted by the demonstrators at the Aldersgate School, Dr. King and Mr. Evans, who directed their attention very particularly to the veins.

This affection can only be mistaken for acute inflammation of the peritoneum, from which however it differs in many particulars, viz. in the violence of the cerebral symptoms; in the rapidity and peculiar character of the pulse; in the state of the skin, the tongue, and the secretions; in the comparatively trifling affection of the abdomen at the onset,* and in that great prostration of the system which is universally present.

The treatment of this malady when the patient is attacked in the worst form, is

* The writer means, trifling when compared with the acute pain and extreme tenderness present in peritonitis.

generally unsuccessful; the grand consideration for the medical man is, whether there is sufficient power in the constitution to warrant the abstraction of blood by leeches. There are certain mixed cases in which this plan is advisable, and if the patient be seen within a few hours after the attack, a few ounces of blood may be advantageously removed from the arm, but in the severer forms let the practitioner beware how he increases the depression already existing by the removal of even this trifling quantity of blood. Should the bowels require a laxative, the best that can be used is six drams of *Ol. Terebinth*, combined with two drams of *Ol. Ricini*. The *Ol. Terebinth* acts in a very mild manner, clearing the bowels of their contents, and also expelling the flatus contained within them; a large dose of *Calomel* and *Opium* should then be given, and followed up by smaller and frequently-repeated quantities of the same, until the mouth becomes affected. External irritation, produced by laying cloths dipped in warm oil of turpentine over the abdomen, may also be employed. The head should not be neglected, the scalp being kept wetted with an evaporating lotion, and where there are marks of great determination of blood, half-a-dozen leeches may be applied to the temples. Where the remedies act favourably the fever will diminish, the pulse becoming less frequent, the pain in the abdomen diminishing; but there will not be that sudden stop put to this disease so generally witnessed in peritonitis; the patient will remain in a very delicate state for some time. It seems even in the more favourable cases that the practitioner can do no more than keep it within limits compatible with life, or, to use a favourite simile of the late Dr. Curry, "It is like a runaway horse, the guider whereof can keep him in the middle of the road, but cannot stop him."

Irritable Peritoneum.—There is a painful state of the peritoneum, now and then met with, which seems totally unconnected with inflammation, although from the extreme tenderness of the membrane it might by a careless observer be mistaken. The patient shrinks from the slightest pressure, and even cries out when the hand is applied to the abdominal parietes; the pulse may be slightly hurried but not much, the tongue is but little if at all altered, and the secretions proceed naturally. There are no febrile symptoms, and the head is unaffected. These circumstances will enable the practitioner to distinguish this affection from peritonitis and puerperal fever, with which alone it is possible that it can be confounded. The

treatment consists entirely in the administration of a large opiate, which should be repeated or not according to the necessity of the case. External fomentations are also attended with advantage.

Intestinal Irritation.—Under this name I include two different conditions of the intestinal canal, which frequently give rise to great disturbance in the constitution, viz., where either great constipation or diarrhœa is present. Where costiveness has existed for any great length of time in consequence of the patient having neglected to pay proper attention to the bowels during the last few months of pregnancy, serious inconvenience will be experienced during and after parturition. The cause is perceptible by the touch; the accoucheur feeling the hollow of the sacrum to be almost blocked up by hardened feces, a portion of which will be forced out by the descending head. In other cases there is an accumulation higher up in the canal, so that it will not be ascertained during labour, but the symptoms manifest themselves soon afterwards, the patient complaining of uneasiness in the head; the pulse is accelerated, the countenance a little flushed, the skin hot and dry; there is slight pain in the bowels, and if the abdomen be examined, there is generally a greater or less degree of fulness to be felt; pressure can be borne without materially increasing the pain. There are thirst and dryness of the lips; the appearance of the tongue is peculiar, being morbidly red, with or without a brown streak running down the centre, and almost invariably dry. The treatment is, obviously enough, to clear the bowels, and for the effectual accomplishment of that object, the use of copious enemata, in addition to purgatives by the mouth, will be required. The bowels may, however, be just in the opposite state, the patient being tormented with diarrhœa, attended with great pain and tenesmus; the stools mixed with mucus, and sometimes with blood. The principal fact to be ascertained is, whether or not inflammation be present, and if there be tenderness on pressure, and other signs denoting an inflammatory condition of the mucous membrane, leeches ought to be immediately applied over the abdomen, and a laxative, composed of half an ounce of *Castor Oil*, with ten minims of *Laudanum*, given by the mouth; after which small doses of *Hyd. cum Creta* with *Pulv. Ipecac. Co.* will be found highly useful. In cases where there are no evidences of such a state of membrane, the pulse being weak and flagging, the countenance sunk, and the skin lax and yielding, the more powerful astringents are indicated, such as the *Sulphate of Cop-*

per, in doses of half a grain to one grain given every four hours, combined with a quarter of a grain of *Opium*. *Opiate Suppositories* are also of great service, and are preferable to the injection of *Starch* and *Laudanum*, which has been so strongly recommended. In addition to these measures, the diet must be strictly regulated, the patient being directed to live chiefly on rice boiled in water, a small portion of brandy and nutmeg being allowed to flavour it. Diarrhœa of a very formidable character is occasionally one of the consequences of uterine hemorrhage, and if great attention be not paid to it, it may end in the destruction of life. The probability of this occurrence should never be lost sight of in the treatment of the severer cases of flooding, for by a due regulation of the patient's diet, scrupulously avoiding articles which have a tendency to go into the acetous fermentation, and those which are of an indigestible nature, this state of things will often be prevented. It is better also to defer the laxative usually given on the third day, to a more distant period, and, if necessary to exhibit it at all, to take care that it is a very mild one. When, however, diarrhœa has supervened, it will be found to be very troublesome in its character; the best treatment is to give astringents liberally, and to be very particular as regards regimen.

The *Sulphate of Copper* with *Opium* will, upon the whole, be found to be the best internal remedy, *suppositories* being at the same time made use of. In some of the more obstinate forms of this affection, removal of the patient into another, and, if practicable, a more pure air, has succeeded, when every remedy that science could suggest had been tried and had failed.

Bartholomew Close, September, 1833.

LONDON MEDICAL SOCIETY.

Monday, September 30th, 1833.

Mr. KINGDON, President.

THIS evening the first meeting of a new session was held, and in consequence of the publicity given to the re-assembling of the Society, and the excitement of curiosity relative to the topic to be discussed,* the benches of the room were fully occupied at an early hour. The chair having been

* These causes—with all humility—as addenda to some of those named by the President, if not substitutes for them.