

eroded from the sixth to the tenth dorsal vertebra. The opening was of large size, so as easily to admit two fingers. The heart lay directly in front of the aneurism. It was small, but otherwise healthy. The aorta was very atheromatous above the aneurism. The left lung was much compressed, but still buoyant. The other viscera and vessels presented nothing remarkable.

Original Communications.

ALKALIES OR ACIDS IN STOMACH-DISORDERS?

By EDWARD WELLS, M.D., Reading.

[Read before the Reading Pathological Society.]

IN the following remarks on the above question, I shall endeavour to put together a few observations derived from actual practice, and shall not trouble you with extracts from works which are within the reach of all. My apology for troubling you at all must be, that stomach-disorders are among the most difficult which we are called upon to treat; and that, in their treatment, the question proposed in this paper becomes frequently a nice point.

I shall jot down these remarks as they offer themselves to my own mind, without attempting any order, which will appear of little consequence to those who have daily to treat diseases observing neither rules nor order in practice, however they may be made to go through a systematic parade in works on medicine.

There would seem to be some patients who have a total inability to take any alkalies at all. There are others, and those more numerous, who have an idiosyncrasy which prevents their taking certain alkalies, though they may with impunity take others.

I had a patient once, a lady, aged 52, who was unable to take magnesia. Her symptoms were as follows: flatulency; want of power, apparently rather nervous than muscular; depression of spirits; liability to lodgments in the large intestine; to erysipelas of the face; and to flushing and heat of head; and she had occasional neuralgic pain over the left eye, and pain also in the left hypochondrium. The tongue was clean; the urine clear; pulse weak. She was ordered—

℞ Magnesiæ ustæ ʒj; mucilaginis ʒij; tincturæ corticis aurant. ʒj; aquæ carui ʒvj. M. A sixth part twice daily.

℞ Pilul. hydrar. chlorid. comp. extracti hyoseyami, extracti colocynth. comp. āā ʒj. M. Fiant pilulæ xij, quarum sumatur i pro re nata.

The effect of the magnesia was to blow her up like a balloon—a result which, she assured me, invariably followed the exhibition of that drug.

Another lady, aged 50, consulted me, complaining of distension of stomach after eating, with feelings of nausea and general discomfort. The tongue was creamy, red, pimply; the appetite bad; the urine clear; the pulse weak. She had also severe occipital headache. The catamenia were irregular, recurring at periods of several months. She was ordered a mixture containing the magnesia usta. When I saw her, shortly afterwards, I found she had been unable to take the medicine, as magnesia invariably occasioned sickness.

I had another patient, a gentleman, who was suffering from pain and great tenderness in the epigastrium, with much nausea and acid eructations, and occasional pyrosis, to whom I prescribed bicarbonate of soda in a mixture. He was, however, unable to take it, as it distended his stomach; and he informed me that he had frequently tried it, and always found the same effects, which were probably due to the disengagement of the carbonic acid.

I have another patient, a lady, aged 50, who is unable to take potass in any form or combination. This inability extends even to the iodide of potassium. The symptoms caused by any of the salts of potass are the most violent cramps in the stomach and bowels, running on into diarrhœa of a painful and dysenteric character.

Again, there are persons who under no circumstances can take the mineral acids. As far as my experience goes, it will generally be found that such individuals have a gouty taint in

their constitution. In all cases where gout can be suspected to be lurking in the system, the greatest caution should, I think, be exercised in administering mineral acids in stomach-disorders, even though they may appear, from the symptoms, to be suitable. A case in point occurred to me only lately.

A lady, aged 43, stated that latterly the catamenia had been very irregular. After suspension for two months, they came on a few days back, but very sparingly. She complained of flushing of the face, giddiness, and an occasional feeling of losing herself. She had fluttering of the heart, and felt very nervous and weak. The bowels were regular; the urine was free and clear; the pulse was weak. She was ordered to take two tablespoonfuls of the compound decoction of aloes thrice daily, and to use a warm hip-bath. She called on me four days afterwards. After taking two doses of the compound decoction of aloes, the catamenia made their appearance, and kept on freely for two days. This had relieved the flushing of the face and the head-symptoms. She now chiefly complained of debility and nervousness. She was ordered—

℞ Infusi quassie ʒj; acidi nitrici diluti ℞x; tincturæ aurant. co. ʒss. Fiat haustus ter die sumendus.

A day or two afterwards, she called to ask me to change the medicine, as the acid in it occasioned so much pain and distension of the stomach. She then informed me that, many years back, before her marriage, she had suffered much from gout, which had also affected her kidneys; and that she had never been able to take the mineral acids. In the present instance, however, neither the urine nor the other objective symptoms denoted that gout had any share in causing her ailment.

In prescribing acids or alkalies for the relief of painful digestion, there is, I think, one practical point to which we should pay great attention, and that is the question whether the pain is located principally at the cardiac or at the pyloric end of the stomach. Where the seat of the pain is chiefly in the right extremity of the stomach, as far as my experience is concerned, the mineral acids will give much more relief than the alkalies. This probably arises from the complication of the liver in the disorder, although there may be no actual hepatic symptoms, and although pain may be complained of on pressure over the right portion of the stomach itself. In these cases, too, on a rigid examination by pressure over the region of the liver, it will generally be discovered that pain is occasioned by such pressure, although the stomach-symptoms are the only ones to which the patient's attention has been drawn, or to which the patient spontaneously draws the doctor's attention. I will give a few instances to illustrate my assertion.

I was consulted by a young lady, aged 20. She had been ailing for some time with symptoms of stomach and liver derangement, indigestion, with pain occasionally referred to the pit of the stomach, and occasionally to the bowels; pain between the shoulder-blades; tenderness on pressure over the region of the liver. The urine was thick; the bowels were costive; the tongue patchy, furred; the pulse 100; the complexion dark, sallow. She had the catamenia every fortnight, but not in excess; slept heavily, and felt languor and lassitude, with occasional headache. This case failed to derive any benefit from the use of alkalies, but was relieved by the mineral acids, manifestly from the cause that the liver was the fons mali.

A gentleman, aged 57, a free liver, in the habit of taking large potations of port wine, called on me, complaining of pain (not severe) at the pit of the stomach, worst three or four hours after eating. There was some tenderness on pressure over the region of the liver, which was full. He was liable to large losses of blood from the hæmorrhoidal vessels, preceded by fulness of blood about the head, which was relieved by the discharge. The bowels were regular; the urine clear; the tongue was pale, whitish; the pulse 64, rather weak. He was ordered—

℞ Hydrargyri chloridi gr. j; ipecacuanh. gr. j; extracti coloc. comp. gr. ij. M. Fiat pilula omni nocte sumenda.

℞ Infusi gentianæ co. ʒvj; potassæ nitrat. ʒss; liquoris potass. ʒiss; liquoris taraxaci ʒvj. M. Fiat mistura cujus sumatur pars 6ta bis die.

Six days afterwards, I saw him again. He still had pain at the epigastrium, increased by pressure over the liver. Nitric acid was now substituted for the liquor potassæ in the mixture; and the result was a rapid disappearance both of the pain at the pit of the stomach, and of the hepatic tenderness; and, under the use of the mineral acid, he became much better

than he had been for a long time before. Ten years afterwards, he died of stricture of the pyloric orifice.

The value of the mineral acids in the cure of the cutaneous eruptions, is well known to practical physicians. My experience would also lead me to infer, that where indigestion is complicated with affections of the skin, the mineral acids will work more good than the alkalies.

A lady, aged 43, complained of an eruption of the skin, becoming very troublesome when she was warm, and covered with a slight scalliness, particularly around the waist. She suffered much from dyspepsia, as shewn by flatulency and discomfort after meals. The tongue was white, patchy; the mucous membrane was slightly ulcerated in the mouth: the urine was thick; the bowels were irregular; the pulse weak. She was ordered bismuth and magnesia usta twice daily; with Plummer's pill, henbane, and compound extract of colocynth, at bed-time. The stomach symptoms were not relieved. She was then ordered gentian, carbonate of soda, and taraxacum. The flatulence after meals was still very distressing. She was then ordered dilute nitric acid with taraxacum, which at once gave relief. And, although there was no evidence of liver derangement in this case, it is probable that that viscus was implicated in the production of the symptom.

On the other hand, where the pain is distinctly referred by the patient to the cardiac end of the stomach, and where that portion of the stomach is the most tender on pressure, I think we shall generally find alkalies more serviceable than acids. Some judgment should here be observed as to the particular alkali which we ought to select. If the pain be situated quite and exclusively at the cardiac orifice, and if there be a total absence of tenderness on pressure, no alkali will give such immediate ease as the carbonate of ammonia. Such cases generally depend upon distress of mind, induced by harassing anxieties and mortifications preying upon sensitive natures.

A young lady complained to me of severe pain, coming on at the cardiac end of the stomach, after long fasting, accompanied by great depression of spirits, and frequently followed by headache. Being a governess, she had been subject to annoyances, and the meal hours to which she had been obliged to conform, had been too far apart. There was no tenderness over the stomach on pressure. The tongue was clean; the pulse was very weak; the skin cold; the urine thick. The catamenia were too copious. These distressing symptoms yielded, as there was no doubt they would, to the carbonate of ammonia with gentian.

When the pain is situated rather more towards the pit of the stomach, and when there is tenderness on pressure, the two alkalies most likely to afford relief will be the calcined magnesia and the carbonate of potass; the former being exhibited when the bowels are constipated, and the latter when they are rather inclined to be relaxed.

The following case may be quoted, as one pretty sure to be relieved by the calcined magnesia, from among many others.

A lady, aged 42, stated that she complained of extreme pain at the pit of the stomach, and down the centre of the back, increased by eating. She had no appetite. There was tenderness on pressure over the epigastrium. She felt sick. The urine was very high coloured, clear; the bowels were confined; the tongue creamy; the pulse 80, rather sharp; the catamenia scanty. She slept badly.

If the bowels, however, are inclined to be relaxed, it will frequently happen that the magnesia will produce diarrhœa, before curing the gastrodynia, for which it is administered. In this case, the bicarbonate of potass will be preferable.

Mr. B. applied to me, suffering from dyspepsia. There was pain after eating, which frequently was followed by vomiting of the food taken. He had much tenderness on pressure over the epigastrium, a white pasty tongue, and thick and scanty urine. A mixture, containing the calcined magnesia, was prescribed. Though it gave some relief to the pain, it occasioned so much relaxation of the bowels, that it was found necessary to change it for carbonate of potass, which soon effected a cure.

In treating cases of dyspepsia, the question, as to whether acids or alkalies should be given, will partly depend upon the condition of the bowels. I have already stated that, if we decide for alkalies, we must be guided by the state of the bowels as to which alkali we would select. But further, the state of the bowels will frequently direct us as to whether we shall use alkalies at all, or prefer acids. When gastric dyspepsia is complicated with irritable bowels, it will generally be found that alkalies are more beneficial than acids. Where the action of the bowels is sluggish, where they are unusually

dull to the operation of aperients, there is certainly not the same objection to acids; there would seem almost an indication that they are called for. Here again the probability is, that in these cases the benefit derived from the acids depends upon their quickening action on the liver. When the symptoms of gastric dyspepsia are severe, and at the same time complicated with great irritation of the bowels, one of these two conditions may be suspected: either that the patient is a tubercular subject, or that the patient is habituated to liquor. I will select a case illustrating each condition, from among several which occur to me.

I was consulted in the case of a gentleman, aged 30, who had been taken ill a fortnight previously, with a cold. His medical attendant had purged him freely with calomel and black draughts several successive days. For the last week he had been suffering from constant vomiting, and rejected all his food. The bowels were also relaxed. After eating anything, he suffered severe pain in the stomach. The urine was thick. Pulse 120. The vomiting had reduced him to extreme debility. The tongue was coated with a brownish yellow fur in the centre; it was red at the tip and sides. He had some wandering at night, and slept badly. He had a desire for cold drinks. There was some wheezing scattered over the lungs, but no dulness on percussion. He was ordered lime water, with Battley, and hydrocyanic acid. Under this treatment the stomach and bowels resumed their natural functions; but soon afterwards phthisical symptoms supervened, and he died a few months subsequently.

I was consulted in the case of a lady, aged 64, who had been in the habit for some time of taking spirits. She had been ill for two months, suffering from a disordered state of stomach and bowels. She had no appetite, and felt an uncomfortable sensation all down the alimentary canal, with constant nausea, but no vomiting. She had frequent attacks of diarrhœa, and occasional discharges of bile. The motions were slimy, but not bloody. She suffered from depression of spirits, palpitations of the heart, faintness. She was also subject to sciatica. The urine was copious, clear; the tongue moist, with a creamy fur; pulse tolerable, 84; skin cool. There was no tenderness over the abdomen. She also was ordered the liquor calcis with hydrocyanic acid, five minims of Battley's solution being added, when the condition of the bowels required it. Under this treatment she got better for a time. And here I may remark, that where gastralgia and irritation of the bowels coexist, the lime water will generally prove the best alkali we can use.

As an instance of a case in which the bowels were confined, which was benefited by acids, after taking the alkali to little purpose, the following may be quoted. It is another proof that when the liver is the cause of dyspepsia, acids are more efficacious than alkalies in relieving troublesome affections of the stomach.

A young lady consulted me, stating that she suffered from discomfort after eating, with distension of the stomach. She had also some amount of pyrosis. She was liable to heat of the face, producing a papular eruption. She had some tenderness over the liver, but none over the epigastrium. I subject to the bleeding piles. She complained also of debility, and of being unequal to her duties of a governess. The bowels were confined; the urine was thick and scanty; the tongue moist, slightly furred; the skin cool, moist; the pulse weak. The catamenia were quite regular. She was ordered—

℞ Sulphuris ʒss; potassæ bitart. ʒij. M. Fiat pulvis omni mane sumendus.

℞ Pilulæ hydrargyri, extracti hyoscyami, aa gr. ijss. M. Fiat pilula omni nocte sumenda.

℞ Infusi gentianæ co. ʒviij; liquor potassæ ʒiiss; spiritus ætheris nitrici ʒiij; liquor taraxaci ʒvj. M. Sumat sextam partem bis die.

A week afterwards, there was very slight improvement. Her appetite was still bad, and she felt weak and below par. She was not worse, but one could hardly say she was better. The urine was less thick; the skin very moist, and cold. She had had some slight bleeding from the piles to-day. She had some enlargement of the cervical glands. She was ordered to continue the sulphur and cream of tartar powders, and to omit the alterative pills.

℞ Inf. corticis aurant. ʒviij; liq. sarsæ fluid ʒvj; spirit. æth. nitrici ʒiij; acidi nitrici dil. ʒj. M. Fiat mistura cujus sumat sextam partem bis die.

Under the use of the acid with the bitter, instead of the alkali, she rapidly recovered.

The indications afforded by the conditions of the urine should certainly be considered as important in directing the

practitioner to the choice of alkalis or acids in the treatment of stomach disorders. And yet I must confess that they have very much disappointed me as safe guides to either an acid or an alkaline treatment. Still there are, I think, certain points, by attention to which we may generally arrive at some approximation to a right judgment on this matter.

If, as far as stomach disorders are concerned, we divide the conditions of the urine into those which have reference to the pathology of uric acid, of oxalate of lime, and of the earthy salts, we may find a few words to say of each.

The oxalate of lime seems to afford the clearest indication. In oxaluria, as it has been termed, the nitric acid, or the nitromuriatic acid, is nearly always highly beneficial. Cases of gastralgia, in which the octohedral crystals of oxalate of lime are discoverable in the urine, are certainly proved by experience to yield more readily to these acids than to any of the alkalis.

In the uric acid pathology of the urine, the presence of the simple lithates of ammonia do not in my opinion afford any sure criterion as to the exhibition of either acids or alkalis; in the cases I have quoted, as relieved either by acids or alkalis, the lithates were generally present or absent indifferently. When disorder of the digestive functions is accompanied with a deposit of free uric acid in the urine, or in other words, with gravel, the alkalis, and especially the bicarbonate of potash, is no doubt indicated. Such cases would, however, come under the category of those to which I have already applied the caution, that in affections of the stomach, where a taint of gout may be suspected to lurk in the system, the acids should not be administered. For we know by the experiments of Dr. Garrod, that free uric acid exists in the blood of individuals suffering from an attack of gout.

In cases of dyspepsia, in which the earthy salts, and especially the triple phosphates, are present in the urine, there is generally such a complication of disorder of the nervous system, that the mineral tonics usually afford more relief than either alkalis or acids. Of the two, however, my experience rather inclines to the exhibition of acids under such circumstances. Still we meet with many cases in which, owing to the depression of the system, we are obliged to administer the volatile alkalis; and, therefore, I cannot say that any fixed rules can enable us to decide between acids or alkalis in stomach disorders, when the phosphates present themselves in the secretion from the kidneys.

I have now gone through the principal points which have occurred to me on this subject. I must beg you to remember that I have limited myself to the question whether acids or alkalis should be administered in stomach-disorders; and that the general treatment of dyspepsia has formed no part of my undertaking. I will briefly recapitulate the various indications to which I have alluded, and will then relieve your attention.

1. There are certain patients who are unable to take particular alkalis.
2. There are certain patients who can never take acids, such patients being those of a gouty diathesis.
3. Pain situated at the cardiac end of the stomach is best relieved by alkalis; while pain at the pyloric end, depending on derangement of the liver, is most amenable to acids.
4. In dyspepsia accompanied with cutaneous eruptions, the mineral acids are more serviceable than the alkalis.
5. Of alkalis, magnesia is best when the bowels are confined, and carbonate of potash when otherwise.
6. The state of the bowels will in some degree guide us as to the use of acids or alkalis, the latter being preferable where irritation of the bowels coexists with dyspepsia.
7. When sickness and diarrhoea coexist, one of two conditions may be suspected—either the patient drinks, or the patient is tubercular.
8. The indications afforded by the urine are limited. The lithates afford no guide. The uric acid requires alkalis. The oxalate of lime requires acids. The phosphates rather lean to acids.

INFLUENCE OF THE WEATHER ON THE AGED. The effect of cold weather in carrying off aged persons has been shewn since the commencement of the present month. In the obituary of the *Times* of December 8th, nine deaths are recorded, at the respective ages of 94, 79, 81, 96, 84, 87, 91, and 76; and in the same paper of the 10th instant, eight deaths are recorded, at the ages of 78, 83, 80, 87, 70, 74, 85, and 68.

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

THREE CASES OF ENCEPHALOID DISEASE.

By WILLIAM HOAR, Esq., Surgeon to the West Kent Infirmary, Maidstone.

[Read at Rochester, September 30th, 1859.]

CASE I. A gentleman, of independent fortune, aged 32, a hale hearty man, of florid complexion, with red hair, very temperate, fond of rural sports, previously healthy, and coming of a healthy family, who had been married about three years, was seized in March, after sitting on the damp ground, with an attack of nephritis, which readily yielded to treatment. In the course, however, of the recovery, he had an attack of what, to all appearance, was phlegmasia dolens in the right leg; this also soon disappeared under treatment.

In the beginning of June, about two months before his death, he suddenly awoke one night in the most excruciating agony in the left inguinal region, which he had never felt before, and a small tumour was then for the first time perceived by his medical attendant at the seat of the pain. The pain abated, and, to all appearance, he recovered; eating and drinking heartily, and pursuing his usual occupations, farming, etc.; but, as he afterwards declared, never perfectly comfortable, nor free from pain for long together. About one month before his death, he was suddenly attacked with alarming hæmorrhage from the bladder, of a venous character, which lasted nearly a week, but then almost entirely ceased; the urine, however, containing ever after much pus, mingled with some blood. The tumour, which had hitherto remained stationary, then began to increase rapidly in size; the pain in it became most agonising; and the patient rapidly emaciated; and, being seized with urgent vomiting, he speedily sank.

POST MORTEM EXAMINATION twenty-four hours after death. The body was much emaciated; the abdomen immensely distended. The penis was well developed; but there were no testes in the scrotum. Decomposition was taking place very rapidly. On opening the abdomen, a large tumour presented itself in the left inguinal region, protruding from behind the intestines, which it had pushed over to the right side. The tumour was nearly as large as a man's head, weighing nearly four pounds, irregular in shape, lobulated, and of a dark colour: in some parts tense, with an obscure sensation of fluctuation; in others, more solid. Three or four convolutions of small intestine were adherent to it on the right side, in fact, were almost buried in it, but without any alteration in the structure or calibre of the intestine. The tumour was firmly adherent to the left iliac fossa (its whole surface); to the brim of the pelvis from the left ileo-pectineal eminence to the right sacro-iliac symphysis (the sigmoid flexure of the rectum being pushed to the right side); to the posterior and left lateral surfaces of the bladder by very strong fibrous attachment; and to the anterior surface of the rectum for the lowest three inches: also, to almost the whole of the inner surface of the lower part of the pelvis. In fact, with the exception of the anterior surface of the bladder, which was more than usually firmly adherent to the pubis, the tumour almost entirely enveloped the neck of the bladder and the rectum; so closely and intimately, that it was impossible to separate them by dissection; and yet there was no solution of continuity in the outer coat of either. The tumour was probably exterior to the cavity of the peritoneum. On section, it presented the appearance of a brain-like mottled mass, easily broken down, with numerous cysts, of various sizes, containing a serum-like fluid. No vessels were discovered in it, neither was there any communication between the various cysts. The testes were both found, although it was somewhat difficult to recognise the separate portions of either. The right was in the inguinal canal, wasted, small, and much elongated. Its vas deferens was traceable along its whole course. Of the left, a portion only was found in the inguinal canal, the remainder being, to all appearance, lost in the tumour; into which it could be traced for some distance, expanding, as it were, into one particular portion, near the centre, which was more defined and somewhat firmer than the rest. The right kidney was twice its natural size, with several small cysts about its