

Three or four tablespoonfuls of serum were found in the lateral ventricles. No other morbid change was observed in the brain. No other organ was examined.

"September 23, 1849."

It now becomes an interesting question—What are the probable effects of repeated seizures of the kind described on the delicate tissues of the brain and its membranes? May they be such as are described in this post-mortem examination?

The first effect is, doubtless, congestion. This may subside after the first and second attacks. But does it entirely subside after the third or fourth? May it leave lesion of tissue? And if so, of what kind? In the delicate tissue of the encephalon, may it have the appearance of arachnitis or of encephalitis?—effusion of serum or of lymph?—or softening or induration?

When, in cases of paroxysmal disease, such effects are found, who shall say, without years of special study and observation, whether, in fact, they be causes or effects?

But that in all such cases a most careful inquiry should be made, in regard to past 'hidden seizures,' there can be no doubt.

Nor does this question cease here. It may become a legal question; and in another and terrible sense, a question of life and death.

A seizure—perhaps a hidden seizure—may take place, and leave a monomaniacal tendency to suicide or homicide. Crime may be committed, and no proof of previous insanity exist. Of such a case, the Law, hitherto, equally with Medicine, has taken no cognizance. This crime may be one involving loss of property, honour, life.

Such a case occurred recently, at Greenwich. A nurse-maid rose from her bed, went into the kitchen, seized a carving-knife, partially severed the head of her little charge from its body; and all this without detectible motive. She had been subject to some kind of seizure, supposed to be hysterical, but far more probably epileptic.

How fearful the consequences of such a state of things might be, I need not say; but certainly every means should be employed to detect such a hidden seizure in such a case; and especially the temples should be examined for ecchymosis; the tongue, for a bitten wound; the pillow, for marks of foaming at the mouth; and the linen, for the stains left by some evacuation; whilst the patient should be carefully interrogated, to detect the slightest incoherence or aberration of ideas, or confusion or defect of memory.

Under all circumstances of sudden crime, the possibility of the occurrence of a seizure should be present to the mind; how much more, if the patient have been epileptic, or if the case be *puerperal!*

But, to return to the medical view of this subject and the case before us: let us bear in mind that the diagnosis is everything in the practice of medicine; and that we have, in diseases of the head, sometimes to trace the affection to deranged function of remote viscera; sometimes to detect an original organic disease of the encephalon; and sometimes to trace the symptoms to a previous, but unobserved, and therefore hidden, paroxysmal seizure.

Manchester-square, Dec. 1849.

REPORT OF A CASE OF  
INTENSE ACUTE TUBERCULOSIS.—TUBERCULOUS ULCER PERFORATING THE STOMACH FROM WITHOUT INWARDS.

By WILLIAM BENEKE, Esq., M.D.,

RESIDENT PHYSICIAN TO THE GERMAN HOSPITAL, DALSTON.

In the following lines, I beg to offer a report respecting a very rare observation. Hitherto, I was unacquainted with perforations of the stomach of the above kind, nor do I know whether they have as yet been described. Rokitansky gives no description of them at all in his "Morbid Anatomy." The case is the more interesting, as the preparation now before me exhibits all the stages of the formation of those ulcers, and I therefore believe the case worthy of publication.

Ann Elizabeth S—, eight years old, a native of Hesse Darmstadt, was, on the 22nd day of June, admitted into the German Hospital.

*Previous History.*—The child's mother is slightly affected with scrofula; it was born in Germany, and had lived in England for about a twelvemonth. Its father is healthy. The child was formerly healthy and strong, but since living in London suffers continually from pains in the abdomen. It

has gradually become emaciated, suffers various disturbances of digestion, and has for about six months past been gradually wasting, from the increasing acuteness of the disease, by impeded breathing, and cough. All medical treatment has been hitherto useless.

*Actual State on the 22nd of June.*—The countenance is anxious; the skin of the face of a greyish yellow; the mucous membranes are pale and livid; the cheeks alone are flushed by a circumscribed redness. The nostrils are closed by coagulated blood, produced by picking. The pupils are dilated; the eyes somewhat projecting; the sclerotic of a bluish colour. The body generally is emaciated; the abdomen tense, and very tender to the touch. It lies with its feet drawn up to the abdomen. The skin everywhere is very hot and dry.

*Respiratory Apparatus.*—The breathing is short and frequent; the inspirations 60 in a minute. The thorax expands equally at every part, but everywhere only very slightly. The intercostal muscles are hardly drawn inwards by inspiration. At all parts of the lungs percussion gives a clear sound, only at the lower and posterior part of the right side there is a dulness of sound; at this spot, moreover, the vocal vibration is not to be felt. Here there appears to be pleuritic effusion. Over the whole thorax is heard large and small crepitation. The child coughs slightly, and expectorates a very small quantity of viscid and frothy mucus.

*Circulating Apparatus.*—The heart dimensions and position are normal; it sounds healthy and distinct; the pulse is 164 in a minute. No other morbid alterations are to be discovered in the circulating organs.

*Apparatus of Digestion.*—The tongue is somewhat humid, and covered with a white-yellowish fur. No appetite at all; the child refuses to take nourishment unless pressed to do so. No nausea. The bowels are relaxed to the extent of three or four yellowish fluid evacuations daily. The abdomen is extremely painful, even on the slightest pressure. Neither liver nor the spleen increased in volume. Everywhere else the percussion-sound of the abdomen is tympanitic. Deep pressure about the cæcum occasions the peculiar crepitation remarked in cases of typhus.

*Urinary Organs.*—The quantity of the urine cannot be measured, one part of it being passed with the motions. The urine is of acid reaction; deposits urate of ammonia; contains no albumen.

*Nervous System.*—No alterations are to be detected, either of intellect, of sensibility, or of movement. The child is, however, at times, very restless and unruly, and almost always drowsy and somnolent.

*Treatment.*—A mixture containing nitrate of potash, and powder of acetate of lead, with opium, were ordered in the first instance, afterwards cod-liver oil. The diarrhoea was, however, only slightly relieved; no further improvement was observable. On the 25th of June, the ratio of pulse and inspirations in a minute was diminished to 154 : 54, but this only for a short time. I therefore abstain from adding any further remarks in regard to the course of the disease. The weakness and dyspnoea, as well as the tenderness of the abdomen, increased more and more, and on the 28th of June the child died.

The *post-mortem examination* took place on the 29th of June, eight-and-twenty hours afterwards.—Body greatly emaciated; high degree of incipient decomposition; slight rigidity of muscles; abdomen tumid, tympanitic.—*Head:* The skull is of normal thickness; the sutures not ossified. Dura mater slightly congested, exhibiting no deposits. The arachnoid and pia mater more congested. On the left side, between the dura mater and the arachnoid, an effusion of serum is observed to ooze on an incision of the dura mater. The arachnoid and pia mater of the right hemisphere contain some very small tuberculous deposits. But the same membranes of both hemispheres at this summit, below the vertex, are found to contain two large plaques, formed by an aggregation of flattened, yellowish, confluent, cheesy deposits. These two plaques extend about half an inch deep on the interior surface of both hemispheres. Beneath these deposits the grey substance of the brain is softened, presenting what we call "simple softening." At the base of the brain are to be found two very small deposits. The brain itself is altogether much congested, and more than commonly soft; the ventricles contain but a very small quantity of fluid.—*Thorax:* The cartilages of the ribs are very soft, and easily cut. The ribs are readily broken with the fingers. The muscles wasted, dry, of a light yellow-brownish colour. The position of the organs is normal. The colour of the lungs of a dirty yellowish-grey.—*Pleura:* In

the whole circumference of the chest the costal pleura is united, by adhesions, with the pulmonary; and these adhesions are less firm on the right side than on the left. In the lower part of the thorax, on the right side, between the costal and pulmonary pleura, is found a fluid, ichorous, grey-yellowish serum, about sixteen ounces in quantity. On the right pleura some miliary tuberculous deposits. On the left side no fluid effusion; but on separation of the pulmonary from the costal pleura, the latter presents a particular spotted appearance. It is covered over and over with a large quantity of flattened, yellowish, confluent, variously-shaped, cheese-like deposits, and is not to be separated from the wall of the thorax. These deposits are quite the same as those which I mentioned as occurring on the brain.—*Lungs*: Both lungs are affected in the same manner; they are crowded in all parts with miliary tubercles. The quantity of these is quite the same in the various lobes, except, perhaps, that in the lower lobe of the left lung the quantity is somewhat smaller. The quality is that of recent miliary tubercles, of the size of a millet-seed. There are no older deposits. All the lobes are in a congested state, containing only small portions of air; the upper lobes, too, are œdematous. An excised portion of lung, slightly compressed, does not swim upon water.—*Heart*: The pericardial sac contains about an ounce of a reddish-yellow fluid. On the interior surface are to be seen, between the serous and fibrous membrane, tuberculous deposits, from the size of a pea to that of a bean. The serous membrane of the heart itself also contains some very small tubercles, more particularly in the grooves. The heart itself is of the normal size, but the wall of the left ventricle is rather hypertrophied, without the volume of the ventricle being thereby diminished. Both ventricles are filled with a large quantity of dark, clotted blood, which, however, do not contain any fibrinous coagula. The blood contained in the vena cava inferior has the same dark-brownish colour, and is nearly bereft of all serous matter. All valves are in a healthy state. The endocardium contains no deposit, except one very small tubercle beneath the mitral valve—a very rare occurrence.—*Abdomen*: Extensive adhesions are discoverable between the peritonæum, the omenta, and the walls of the abdomen. Moreover, the serous covering of the liver, of the stomach, &c., is united by adhesions with the said walls.—*Peritonæum and Mesentery*: The capillaries of both these membranes are highly ingested; the membranes themselves loaded with tubercles in enormous quantity. The size of the tubercles is found to vary from that of a small millet-seed to that of a walnut; the largest are to be found in the mesenteric glands, and in the serous membranes of the liver and stomach. These are not of the spherical and circumscribed form, but of an irregular shape. They are composed of the well-known yellowish, cheese-like, crumbling tuberculous mass. The external membrane of the peritonæum, in its union with the parietes of the abdomen, presented the same striking character as had done the left pleura. Owing to the very large quantity of deposits it resembled a spotted, variegated lining to the walls of the abdomen; there was to be seen, in the most exquisite manner, every kind of acute tubercle. Those last deposited were glass-like and transparent, like recent butterflies' eggs; some of them contained small pigment-like spots; the next following generation (so to call it) consisted of a yellowish, obscure, but very soft mass; the third one, of hardish, millet-seed-like granules; the fourth generation consisted of somewhat larger, yellowish, circumscribed, and prominent masses, easily cut, of the solidity of boiled albumen; whilst the fifth was composed of a dry, friable, cheese-like mass, crumbled by the gentlest touch. I need hardly mention, that all the intestines were found united by adhesions between the various folds of the serous membranes, and could only be separated by artificial means. It was very remarkable, that there were neither fluid effusions nor any of the contents of the bowels within the cavity of the abdomen.—*Liver*: I have already alluded to the large, tuberculous deposits on the surface of the liver, which were coherent both with the serous membrane and with the surface of the liver itself. The substance of the liver was bloodless, of a yellowish tint, showing, in several places, traces of fatty deposition. Only a very few tubercles of the smallest size were deposited in the substance of the organ; they had the above-described transparent appearance. The volume of the liver was not enlarged; the gall-bladder contained a small quantity of thin, fluid, green-yellowish bile.—*The spleen* was rather enlarged; but this enlargement, owing to the solid character of the serous membrane, crowded with tuberculous deposits, took place not in the common way; the organ was, on the contrary, compressed at the upper part, in a triangular

form. No hyperæmia. The texture not very easily torn; the colour of a brownish-blue. In the organ itself a few scattered, very small tubercles, of the above-described first and second generation.—*Pancreas*: marbled with tuberculous masses.—*Kidneys*: In both kidneys are found a large quantity of tubercles, of the second, third, and fourth generation. In the right kidney they have been produced merely in the cortical substance, in the left one in the tubulous substance as well.—*Bowels*: The *stomach* is united by adhesions with the transverse colon in such a manner, that a perforating ulcer of the anterior wall of the former is covered and closed up by the latter. The ulcer is of the size of a shilling, and the perforation of the mucous membrane has the circumference of a sixpence. The mucous membrane of the stomach is rather softened, easily rubbed away. Large quantities of tuberculous masses have been produced in and beneath the serous membrane. A second ulcer, not yet perforating, which I will afterwards describe, is found on the posterior wall of the stomach. Along the whole extent of the mucous membrane of the bowels only a few small tubercles are detected; most of them in the jejunum and ileum; the smallest quantity in the duodenum and colon; in the rectum none. Besides this, about six of the well-known tuberculous ulcers of the mucous membrane are present, one in the transverse colon, the other portion in the jejunum and ileum. Some of these ulcers were more perfect than others, so that every stage of the formations of the ulcers was to be seen. One, too, perforated the walls of the jejunum in the most common way, from within to without; but this ulcer was, like that of the stomach, closed up by another portion of the jejunum, united by adhesions with the perforated wall, whereby the contents of the bowels were prevented from escaping into the cavity of the abdomen. These contents of the bowels consisted partly of hard, yellowish, fæces, partly of fluid, yellowish, flocky masses.

With regard to the ulcers of the stomach, the preparation before me removes every doubt as to the mode of their formation—a preparation can hardly be more instructive.

At first, the tuberculous masses were deposited beneath and in the serous membrane of the stomach; these deposits vary most in respect to size. But whilst the smaller ones, of the size of a millet-seed, or of a pea, inflict no injury at all upon the subjacent muscular membrane, the larger, progressively increasing, seemed to destroy that membrane by what we call detritus. In this stage there is to be seen one tubercle penetrating the muscular membrane, covered inside only by a very tender layer of the mucous membrane. Then the perforation of this membrane takes place, and the tuberculous mass, firmly united with the serous and muscular membrane, projects nakedly into the cavity of the stomach. The whole wall of the latter is perforated, but the hole is plugged by the tuberculous mass, the tubercle forming a part of the wall itself; then two other alterations took place, which may be advantageously studied in the preparation. On the one side the tuberculous mass is diminishing, crumbling, and falling off, so that only a quasi nucleus, stopping up the walls of the stomach, remains; whilst, on the other side, the holes of the mucous and muscular membrane are enlarging in such a way that their edges lose all connexion with the tuberculous mass; the holes are larger than before. The edges of these holes are capable of being inflated, and thus elevated to about half an eighth of an inch above the external layer of the muscular membrane, which layer is still coherent with the tubercle. At length the nucleus alluded to also disappears, falling out of the hole, and leaving the perforation of the walls no longer closed by anything whatever. In this event, the perforations of the exterior layer of the muscular and of the serous membrane become enlarged; not so the mucous membrane; and thereby, in fine, the perfect perforation has such a form, that the largest aperture may be seen in the superficial serous membrane, that of the other membranes becoming gradually smaller, and the smallest existing in the mucous membrane. The edges of the aperture of this latter membrane are well rounded off. I scarcely hope to be fortunate enough to meet a second time with a pathological preparation equally complete and sufficiently instructive to remove every doubt, concerning the mode in which this kind of perforating ulcers of the stomach is formed.

I need not add any remarks relative to this interesting case; there is no doubt the primary and fundamental affection of the blood was first localized in the peritonæum and mesentery, and passed from there to the other organs; but we very rarely meet with so grave an affection of nearly all the organs of the body. With regard to the pathological phenomena during life, I have omitted none of them, and therefore believe, the

simple relation affords a sufficient answer to all questions which might be put in reference to the affections of the brain, of the lungs, of the stomach, &c. I shall only state, in general terms, that the pathological phenomena during life were not of such intensity as the post-mortem examination would suggest.

German Hospital, Dalston, 1849.

## ON CERTAIN IMPORTANT POINTS IN THE CHEMISTRY & PATHOLOGY OF THE URINE.

By ARTHUR HILL HASSALL, M.B.

(Continued from p. 608.)

*On the Presence of Oxalate of Ammonia in the Urine.*—This important salt is very generally, if not constantly, present in the urine; it is to be detected more by its own proper tests than by the form of crystal, which is subject to many modifications liable to be confounded with those of other saline urinary compounds.

I have ascertained that it very generally enters into the composition of the soluble dumb-bells already described; in some cases, indeed, these would appear to be entirely formed of this oxalate.

*On the Presence of Oxalurate of Ammonia.*—Oxalate of ammonia and urea evince considerable affinity for each other, and enter readily into combination, in which state they may be frequently detected in the urine.

*On Urea-Chloride of Sodium.*—Chloride of sodium and urea also manifest a strong affinity for each other, and form, when dried, crystalline compounds, which are very frequently encountered in the urine under different modifications.

*On Urea-Chloride of Ammonia.*—Hydrochlorate of ammonia and urea very readily combine with each other, and the compound may be easily prepared artificially.

I have not as yet succeeded in identifying it in the urine; there is scarcely a doubt, however, but that it is sometimes present in that fluid.

I have many observations and drawings illustrating various particulars connected with the above general facts.

Notting-hill, Dec. 14, 1849.

(To be continued.)

## ON LACERATION OF THE PERINÆUM.

By ROBERT BARNES, M.D., London.

I OBSERVE, in THE LANCET of May 26th,\* an interesting account of a case of lacerated perinæum, and cure by the twisted suture, by Mr. Rogers. I take the liberty of offering a few observations on the subject, because I believe that the method pursued in that case, although, fortunately, successful, is not by any means the best calculated to repair the distressing injury in question.

Other cases besides that of Mr. Rogers have long removed all doubts as to the possibility of cure in similar cases, but it should also be remembered, that repeated failure of the twisted quill, and other forms of suture, has rendered the prospect of recovery under their use extremely discouraging. When we reflect upon the extent of the surfaces to be maintained in apposition, the almost constant motion of the two sides of the perinæum, and the unavoidable irritation produced by the passage of urine, fæces, and discharges from the uterus and vagina, it is no matter for surprise, that in Mr. Rogers's first attempt, at the "end of five days he found that the two stitches had ulcerated through, and that the fissure was as bad as ever." I have witnessed several similar attempts which have issued in the same result. The second operation in which the twisted suture was used, is one which, when performed with great care, and under favourable circumstances, has occasionally been successful; and Mr. Rogers's case is valuable, as a fact in illustration. Still, I believe that no amount of skill and precautions will justify the surgeon, in the majority of cases, in looking for perfect union by means of any of the sutures in common use. Such has hitherto been the difficulty of completely restoring the perinæum to its original integrity, that surgeons have often been content to obtain a closure of the posterior half of the fissure; and an eminent obstetric author

\* We offer an apology to Dr. Barnes for the long delay that has taken place before this paper was printed. If he saw the magnitude of the pile of communications before us, he would admit that our weekly task is one of both delicacy and difficulty.—ED. L.

has sought to console his brethren under the disappointment of baffled art, by assuring them that it is *better not to cure the whole laceration!*

As I am unable to assent to this proposition, I feel it my duty to call the attention of the profession to a proceeding which may relieve the surgeon from the necessity of adopting this unsatisfactory conclusion;—I allude to the application of the bead-suture of my colleague, Mr. Charles Brooke. This ingenious invention appears to me to fulfil all the conditions required by the complicated difficulties of the case. Perfect apposition of the entire surfaces is made secure by the nature of the suture, which can be adapted to any point of the fissure both along the raphé externally, and within the vagina; there is little danger of the suture giving way by ulceration, as no strain ever comes upon the threads, but is spread over the smooth surface of the beads; and this circumstance is attended by the peculiar advantage of enabling the sutures to be retained long enough to ensure firm adhesion; the beads have also a great superiority over the needles, in maintaining deep pressure, a point of the utmost importance. The result of this perfect approximation is, that no lodgment is afforded for clots, pus, urine, or other irritating matters, to prevent union by the first intention throughout the entire extent of the wound.

Having recently attended a case of extensive laceration under very unfavourable circumstances, with Mr. Brooke, in which his suture was employed with the most perfect success, I am in a position to bear my unqualified testimony to the advantages of this proceeding. Having done this, I feel that it would be improper on my part to pursue the subject farther on the present occasion, either by examining the defects of the usual methods, or by describing minutely the operation of Mr. Brooke, or by giving the history of the interesting case to which I have referred. This duty more fitly devolves on the ingenious inventor, who, I trust, will shortly place before the profession, in a comprehensive manner, an account of the various operations he has contrived for the relief not only of laceration of the perinæum, but of the many other distressing and rebellious lesions to which the vagina and urethra are exposed.

Gloucester-terrace, Hyde-park, 1849.

## CASE OF STABBING; PROTRUSION OF OMENTUM; STRANGULATION OF A PORTION OF INTESTINE; OPERATION AND RECOVERY.

Reported by JAMES TEAGUE, M.R.C.S.Eng.,  
Blakeney, Gloucestershire.

ON Sunday, August 12th, at three A.M., I was called to attend a man named Richard V—, aged thirty, who, it was stated, had been stabbed in a brawl. I immediately hastened to his house, about a mile distant, and upon examination discovered five wounds; one in the abdomen, three inches above the left ilium, two in the side, one in the arm, and another in the forehead; none of which, however, appeared of much importance except the first; but this was of a very serious description: it was about two inches in length; its direction was oblique, and from behind forwards, the anterior extremity being the deeper; out of this wound was protruding about two and a half inches of omentum, jagged and bleeding. Upon introducing my finger into the wound, I found the omentum very tightly constricted by the peritonæum, but could discover no intestine bound in along with it. Under these circumstances, I determined to cut off the protruding portion of omentum, and allow the constricted part to remain as a plug, which would prevent hæmorrhage into the peritonæum: this plan of action I considered better than to return the injured viscus into its cavity. Mr. Collins, of Newnham, whom I had previously sent for, now arrived, and coinciding with the view I had taken, I cut off the omentum on a level with the external oblique muscle, passed one suture through the integuments to keep them together, and applied a strap or two of adhesive plaster; no bleeding followed.

From the period he received the wound, which occurred about twelve o'clock the previous night, he had suffered excruciating pain, and had lost a considerable quantity of blood, which caused him to faint several times before reaching his home, whither he was obliged to crawl upon his hands and knees; the exertion of doing so, probably causing so much omentum to protrude.

After the operation, I ordered him forty minims of tincture of opium, and left him at six o'clock much freer from