venous hyperæmia in the remaining coats of the intestinal wall. But, there again ensues also, from the more completely filled peritoneal vessels, when the obstruction to the hepatic circulation continues, a more copious transudation, and an increased loss on the part of the blood—of its plasma, rich in albumen. This offers an explanation why tapping affords invariably, but transitory, amelioration; and why, notwithstanding the improvement which in many respects is thereby induced, it cannot arrest the progress of the general impairment of the nutritive functions. This operation, therefore, must not be undertaken unnecessarily, but only in response to an urgent indication. Such an indication is offered when the dyspnoea, from upward displacement of the diaphragm, threatens life, or when an obstinate vomiting is probably attributable to mechanical derangement of the digestive canal, due to the large amount of ascites; if, under these circumstances alone, we resort to paracentesis, it will accomplish all that can be expected from any symptomatic treatment."

We see, then, that these five eminent authorities consider that paracentesis should only be performed as a *dernier ressort*.

The two exceptions to which I alluded are my much lamented teacher, Dr. Murchison, and Dr. Roberts of University College Hospital.

Dr. Murchison (*Diseases of the Liver*, second edition, page 288), says: "The operation, when delayed until the last, is often followed by rapid sinking, with typhoid symptoms.....The advantages of early tapping are these. First, by removal of pressure, the establishment of collateral circulation through the more healthy portions of the liver itself, as well as the veins of the abdominal parietes, is promoted. Secondly: the functions of important parts, which had been impaired or arrested by the pressure, are restored. Not only are the lungs relieved; but, by the removal of pressure from the portal and renal veins, assimilation and the secretion of urine are increased. Thirdly: diuretic and other remedies, which, when the abdomen is full of fluid, have produced no effect, probably from not being absorbed, will often (after paracentesis) act powerfully, and thus retard or prevent the accumulation of fluid in the peritoneum. As soon, therefore, as the abdomen becomes moderately distended with fluid, I would recommend you to lose no time in having recourse to paracentesis. Even should the fluid reaccumulate repeatedly, you need not despair."

Lastly: Dr. Roberts, when speaking of the treatment of dropsy, says: "There is one class of cases in which paracentesis may not uncommonly be performed as a curative measure, as far as the ascites is concerned—namely, when it is dependent on cirrhosis of the liver. In such cases, I have for some years had recourse to repeated paracentesis, as a systematic method of treatment, the fluid being taken away again and again, should it reaccumulate; and the results have been most satisfactory—due care being, of course, exercised in the performance of the operation, and in the subsequent management of the case."

GOUT AS A TROPHO-NEUROSIS.

By SOLOMON C. SMITH, L.R.C.P.Ed.,

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DR. DYCE DUCKWORTH'S article in the JOURNAL of March 26th, on Gout considered as a Tropho-neurosis, will have been read with interest by all who are dissatisfied with the current explanation of the cause of that disease; but I think there will be many who, although glad to accept the suggestion as to the part taken by trophic nerves in producing the attack, will hesitate to follow him in considering nerve-influence the first cause in regard to time, and will be rather inclined to retain the belief that uric acid is the cause, and that trophic nerve-disturbance is the mode by which the symptoms are produced.

The sudden invasion, the occasional rapid retrogression, the perfect recovery and absence of permanent organic change even after the most acute early attacks, its alternation with various neuroses, such as neuralgia, asthma, and angina pectoris, and its obvious production by shock, worry, and other nerve-depressants, all suggest its connection with nerve-influence; and, now that recent researches have shown that perverted action of trophic nerves may, by itself, lead to inflammation and destruction of joints, the link seems to have been found by which gout and the gouty neuroses may be connected together; so that, instead of looking at them as alternating conditions, we may consider them all alike as various neurotic expressions of a state of system which we have to describe by the term "gouty."

But the suggestion that this gouty habit is itself a neurosis—that the lithæmia is to be looked at as the result of a still earlier alteration of some hypothetical trophic centre—is one which will not very readily be accepted. It is difficult to understand why an affection of one trophic centre should produce both lithæmia and arthropathy, and that it should be often associated with a varying series of other neuroses,

if it were itself the primary lesion; but, if we accept the proposition that the perverted action of the trophic centre which produces gout is due to its being poisoned by blood containing uric acid, just as it is admitted that the other neuroses are due to poisoning of their centres by the same cause, we have a fair working hypothesis, and can put into form many facts which have hitherto appeared somewhat unconnected.

Men vary greatly in the manner in which they perform their tissue-metamorphoses, and in the ease with which they get rid of their nitrogenous excreta, and hence in the readiness with which they become the subjects of lithæmia. The nervous system of different individuals, and even of the same person at different times, also varies much in its power of resisting toxic influence. All men are not made drunk by the same quantity of alcohol, nor do they all show its effects in the same way. So it is with lead, with tobacco, and many other poisons; and so, I think, it is with uric acid. One nervous system is so resistive that it requires high feeding and a sedentary life to produce a dose large enough to lead to symptoms. Another is so susceptible that a single incautious meal will produce an attack; and this attack will vary according to the nerve-centre affected. It may be asthma, angina, or neuralgia; or, if it affect certain trophic nerves, it may show itself as herpes, or as that inflammation of joint-structures which we have always hitherto called gout, but which we may in future have to describe as lithæmic arthropathy. By a theory such as this, giving a due value to both the toxic and the neural factors in the production of gout, we are able, I think, to explain more fully its varied phenomena, and its connection with other morbid conditions, than by attributing its causation entirely either to nerve or to uric acid.

CRIMINAL ABORTION: A FŒTUS OF THREE MONTHS CUT UP WHILE IN THE UTERUS: PERITONITIS: RECOVERY.

By GEORGE E. WHERRY, M.B.Cantab., F.R.C.S.,

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A FINE young woman, aged 19, consulted a Cambridge chemist named Ransome, and his wife, a professed midwife, and took medicines with intent to produce abortion, but without the desired effect. On Sunday, December 5th, 1880, she was induced by the Ransomes to submit to an operation at the hands of a man named Lepper, who came from London. After payment of £10, he passed up "a silver hook", which "hurt her very much", and blood came away. No witnesses were present. Another similar operation was performed a few hours later, causing great pain, and some loss of blood. On both occasions, she walked a distance of more than a mile to the chemist's shop where the operation was performed.

On the following day, December 6th, I saw her. She had great pain in the abdomen, which was very tender and tympanitic; constant vomiting and retching; pulse 120; temperature 102.5°; with other signs of peritonitis. The os uteri was small, within easy reach of the finger. Blood passed in small quantities.

On December 7th, the symptoms were very urgent, and Professor Humphry saw the case with me. In the evening, parts of a fœtus passed from her, consisting of the extremities and trunk; the head came away an hour or so afterwards. There was no decomposition; the skin was rosy and firm. The legs were separated from the trunk and upper extremities, and the head severed from the body. The fœtus was about three months old; the head was large; there were indications of the eyelids; the membrana pupillaris was visible; the mouth was open, showing the tongue. The toes and fingers were nearly separate; nails were commencing. The cartilaginous arches of the upper dorsal vertebræ were closed.

On December 8th, there was no improvement in her condition. Vomiting and retching continued as before. Pulse 124; temperature 100.5°. Dr. Humphry again saw her, and removed the placenta.

December 9th. Pain was very severe. Vomiting and retching continued. The abdomen was tender and tympanitic. Pulse 120; temperature 101.5°. She had great pain in the right elbow and forearm.

December 11th. She was so very ill that, by my advice, her depositions were taken by the magistrates.

December 14th. The symptoms had continued, without any improvement. A red flush, like erysipelas, appeared about the umbilical scar of the swollen abdomen.

December 15th. She kept down a little milk and port wine. The redness was spreading over the abdomen.

December 16th. The symptoms were as before; hiccupping was troublesome; loose stools, with very foul smell, passed from her. There was rather less distension of the abdomen.

December 18th. She was still very ill, and suffering as before. She had rapid breathing, cough, and expectoration; there were *râles* at both bases of the lungs, and slight dullness.

The symptoms continued until the end of December, with the addition of pelvic pains, tenderness over the uterus, and dullness on percussion. The stools were still very foul. She then began slowly to mend, and, in spite of one or two relapses, was able to leave her bed eight weeks after the operation, and can now walk slowly. In relapses, a large quantity of matter and blood passed from the uterus. The treatment consisted in the diet of milk and beef-tea, port wine, milk, and soda water ice. Opium was not kept down, and did not relieve. Morphia injections were used with the best effect, and the patient was under the influence of morphia for more than five weeks. Diarrhoea, with foul-smelling stools, occurred now and then. Constipation was relieved by injections, and, later on, by castor-oil and tincture of belladonna.

REMARKS.—This is of some interest as a medico-legal case. The fœtus having been cut up into pieces *in utero* at such a period of pregnancy is extraordinary. The symptoms which followed are best explained by supposing that the instrument used perforated the uterine wall, and so caused peritonitis. The girl was unable to appear when the prisoners were brought up for trial; and, in consequence of some legal flaw, the depositions of the patient herself were not admissible as evidence, and the case rested on the medical opinion that nothing but instrumental interference could have cut up the healthy fœtus in the uterus. Lepper and the Ransomes were convicted, and each sentenced to five years' penal servitude.

CLINICAL MEMORANDA.

CONGESTION OF THE LUNGS IN SUNSTROKE.

MUCH discussion has taken place concerning congestion of the lungs in sunstroke, and different views are entertained as to its cause. It appears to me, however, that the cause of this phenomenon, in the cerebro-spinal variety of sunstroke, is sufficiently evident.

When we carefully consider the symptoms and *post mortem* appearances, I believe we can have no doubt that congestion of the lungs results from paralysis of the pneumogastric nerves, at the same time that there is irritation of the sympathetic; and, moreover, that death is in a great measure due to these lesions. The symptoms that point to this are occipital headache, difficulty of deglutition, oppressed and laboured breathing, tumultuous action of the heart, rapid full pulse, and nausea with endeavours to vomit. On *post mortem* examination, the heart is found rigid and firmly contracted; the arteries are empty, while the venous system is overloaded; and the lungs are gorged with blood, and more or less oedematous.

Now, if we contrast these with the symptoms and *post mortem* appearances where division of the pneumogastric nerves has existed, we will at once see a striking analogy between them. Thus, in cases where the pneumogastric nerves have been divided, the symptoms are exactly similar to those above stated. There is the same difficulty of deglutition; the respiration is laboured and oppressed; the heart's action is violent and spasmodic; while nausea and fruitless efforts to vomit are also present. After death, we find the same striking resemblance in the appearances seen in both cases. The heart is contracted and rigid; the arterial system is empty, while the venous is distended. The lungs also are engorged, and the small bronchi choked with mucus.

The probability of the symptoms above detailed being due to paralysis of the pneumogastrics, is further increased by the fact that the sun exerts its principal influence on the medulla oblongata, and that, in these cases, there is always more or less evidence of paralysis of the other nerves arising from this part of the brain. Death is, I believe, in a great measure due to the same cause; though of course the fatal result is hastened by the injurious effects on the general system of an exceedingly high temperature.

Under these circumstances, would it not be advisable, in severe cases of sunstroke of the cerebro-spinal variety, to try stimulation of the pneumogastric nerves by electricity?

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HEMOPTYSIS REMOVED BY MENSTRUATION.

HIPPOCRATES (*Aph.* v, 32) says, "Hæmoptysis in a woman is removed by an eruption of the menses". Illustrations of the truth of this aphorism are not common, but the following appears to be a case in point. Catharine T., aged 24, widow, was admitted as an out-patient at the General Hospital on March 24th last, complaining of bringing

up bright red frothy blood. She first spat blood two years ago, after carrying a heavy trunk, when it lasted a week. It came on again last spring, and lasted a week. Just before Christmas, she spat a great deal of blood, and, since that time, it had come on every month for a week before menstruation, and had stopped at the establishment of that flow. Menstruation had lasted only two days, and had been scanty. She had a slight cough in the morning, but no expectoration except blood; no dyspnoea, pain, wasting, or sweating. The tongue was clean; the appetite good; the bowels open; she slept well. The heart-sounds were normal. There were some slight flattening, and diminution of the breath-sounds at the right apex. Under the use of ergot, the hæmoptysis has not recurred.

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THERAPEUTIC MEMORANDA.

IODOFORM IN SKIN-DISEASES.

IT is satisfactory to find that my proposal to employ iodoform as an efficient remedy in some skin-diseases other than those due to syphilis, is confirmed by two observers so competent as Dr. Radcliffe Crocker and Mr. Rickman Godlee. I take it that the sum of my communication and of Dr. Crocker's reply to it comes to this: namely, that iodoform employed as ointment, or, as I myself prefer it, as "glycerole", is an efficient application to moist purulent raw surfaces, such as present themselves in confluent impetigo; and that, when the purulent discharge has, by means of this application, become serous, then iodoform has done its duty by advancing the diseased condition through an important stage towards recovery, and ceases to have that special efficacy as to further stages of recovery, which it exhibits in carrying the morbid surface rapidly through its suppurating stage. If this be so, my communication to the JOURNAL has been the means of establishing an important gain to cutaneous therapeutics, since it is not too much to say that, hitherto, it has been found a remarkably difficult matter, in a preponderating majority of the cases of confluent impetigo, to induce, at will, a rapid involution of the suppurating stage of that disease.

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BELLADONNA IN THE SICKNESS OF PREGNANCY.

SEVERAL severe cases of sickness having lately been under my care which had resisted all the usual remedies, it occurred to me to employ belladonna in repeated small doses. The results hitherto have been most encouraging; and I am able to promise relief with an amount of confidence which could not be justified by the usual effects of bismuth, bromide of potassium, etc., in my hands.

Mrs. F. had suffered terribly in her first pregnancy; constant vomiting had reduced her to a skeleton; and the most serious results were feared. I proposed Copeman's method, but, in consultation, this was decided against; and in this miserable condition she was carried on to full time by nutrient enemata. After a tedious convalescence, she became pregnant again, and came to me in great distress, sickness having at once begun. The usual treatment again failed: I therefore gave her two minims of tincture of belladonna in a drachm of water every hour. The same day she was better, and has had no return which does not at once yield to the same treatment.

Mrs. S. had suffered much during two previous pregnancies. When called to see her during her third pregnancy, I ordered the same as in the last case, and was much disappointed, on my next visit, to find she was no better. The medicine, instead of allaying, only made the sickness worse. I asked to see the bottle, and found that the chemist, in the village near where she lived, had dispensed syrup instead of water, probably owing to my indistinct writing. When this was corrected, the relief was immediate.

In Miss L., severe sickness, coincident with an attack of acute ovaritis, was followed by general peritonitis. Several days' incessant retching had reduced the patient so greatly, that collapse was hourly expected. Five minims of the tincture in water were given every hour until six doses. On my next visit, she had only vomited twice; and this symptom never returned. I should say, however, that the acute peritoneal symptoms disappeared at the same time, the ovaritis still remaining.

I do not know whether the drug has been used in this way, in repeated doses at short intervals. My experience of it now has been most gratifying; and I would be glad to hear if it has been so successful in other hands.

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