opened freely, drained, and frequently irrigated. The question of a movable joint here is of secondary importance. The main thing to aim at is to keep the limb and preserve the life of the patient.

PYAEMIC SYNOVITIS.

The wonderful recoveries which occur when a patient suffering from pyaemia gets pus in a joint are well shown in the following case:

CASE VII.—A woman, aged 25, was admitted to the Metropolitan Hospital under my care, suffering from pyaemic suppuration of the arm and left knee-joint. The pus had formed very rapidly. The knee-joint was opened and drained. All wounds healed, and the patient left the hospital six weeks after the operation able to bend her knee and walk. Seen often since, and she has now practically a normal knee-joint.

The rapid production of pus in these cases, and the great urgency with which the conditions appeal to the surgeon, are in a way preservative to the limb because the joint is opened promptly, drained, and irrigated, with results that are quite remarkable.

This last case emphasizes better than anything one of the objects of this paper, which is to show the necessity for early and more effective treatment in certain cases of synovitis the origin or progress of which in any way suggest sepsis. It also proves my statement with regard to the recuperative and protecting power of the synovial membrane.

Here a joint is distended with pus, but because of its rapid formation and early recognition the joint is freely opened and drained before the synovial membrane is disorganized, with the result that the membrane reasserts itself, and a good joint is preserved to the patient.

In cases of synovitis, then, which are not associated with rheumatic fever, some septic source must be carefully looked for, and if found, treated.

In the other group of cases, which it will be noticed are mainly monarticular, my experience goes to show that when, without any adequate known cause, a joint becomes distended with fluid, often associated with a rise of temperature, unless in a very few days improvement takes place, the joint should be opened, washed out and sewn up.

In cases of injury followed by increasing temperature, great distension, local pain, and general distress, no time should be lost, but the joint should be opened, the fluid if possible then and there examined, and the joint should if necessary be drained. By this means the septic fluid is got rid of before much damage has been done, the synovial membrane recovers itself, and the movements of the joint are unimpaired. When once the synovial membrane has been overcome and the cartilage eroded, a stiff joint is the best that can be expected. Early incision and washing out will prevent many of these. No harm can happen to the joint when this is properly done, and no joint can be properly washed out through a trocar. An incision sufficiently large to admit of an examining finger should be made, in order that the condition of the cartilage and membrane may be felt.

There is no hesitation on the part of the surgeon to open the joint freely for the removal of a loose body or cartilage. And there should not be any at all, in opening the joint, in such cases as have been described above, having regard to the good results obtained when this is done, and to the disasters that occur when some form of "expectant" treatment is carried out. Great good may be done, and a definite advance made in their surgical treatment by the early recognition and treatment of these conditions of septic synovitis.

REFERENCE.

¹ *Clinical Journal*, March 1st, 1899.

BEQUESTS AND DONATIONS TO HOSPITALS.—Mr. W. W. Astor has given £50,000 to the Great Ormond Street Hospital for Sick Children as a fund for the building of a new out-patient department, to be dedicated to the memory of his little daughter, Gwendoline Astor, who died last autumn. Under the will of the late Mr. Henry Maitland, of St. Andrews, the sum of £2,000 each has been bequeathed to the Edinburgh Royal Infirmary and the Edinburgh Medical Missionary Society, £1,000 each to the Ventnor Hospital for Consumption, the Edinburgh Royal Hospital for Sick Children, and the Longmore Hospital for Incurables, and £500 each to the Craigleith Victoria Hospital for Consumption, the Royal Infirmary, Dundee, and the Edinburgh Royal Maternity Hospital. The Chelsea Hospital for Women has received a donation of £1,000 from the estate of the late Mr. Francis Thomas Freeman, allotted under the discretionary powers of the executors, and the North-Eastern Hospital for Children, Hackney Road, has received a donation of £750 from the same estate.

A Lecture

ON THE

USE OF PARAFFIN FOR SUNKEN NOSES.

Given to the Post-graduate Students of the West London Hospital, December 1st, 1902.

By STEPHEN PAGET, F.R.C.S.,

Surgeon to the West London Hospital; Surgeon to the Throat and Ear Department of the Middlesex Hospital.

GENTLEMEN,—The history of this method of treatment is a curious chapter of surgery, for the method was not invented for the treatment of sunken noses, and it has been used over a very wide range of surgical deformities. There has been, perhaps, a certain extravagance, an excess of zeal, in the treatment of this or that case; but we have by this time plenty of evidence that the injection of paraffin has done good in cases of prolapse and of fistula, even after the failure of the ordinary operations. It is worth while, therefore, to note the original use of the method.

In May, 1899, Gersuny of Vienna was consulted by a young man who had undergone the removal of both testicles for tuberculous disease, and now was obliged to submit himself to medical examination as to his fitness for military duty. Gersuny, in the course of some experiments on animals, had observed that hard vaseline melted and injected under the skin remained there unchanged as a rounded swelling; and he bethought himself that he could in this way produce the appearance of the testicles in the scrotum. He therefore injected 11.6 c.cm. into the right half of the patient's scrotum, and 10 c.cm. into the left half; not all at once, but five injections in all. The patient passed his medical examination without detection. A year later, in May, 1900, the lumps of paraffin were unchanged, and felt as hard as cartilage. In the autumn of 1900 the patient had typhoid fever, and his temperature rose to the melting point of the paraffin, 104° F. According to his own account, the lumps at this time became softer, and seemed to run together; but in May, 1902, they were as they had always been, perfectly hard.

Gersuny's next case was that of a girl, aged 18, who two years previously had undergone operation for cleft palate. The cleft had been closed, but the palate was too short to reach the back of the pharynx, and the patient could not sound hard *g* or *k*. Gersuny, with some difficulty, succeeded in enlarging the soft palate by injecting paraffin into it, and by this method he made some improvement in the patient's speech. His third case was one of the same kind, and was improved; but the injection gave severe pain. His fourth case was a sunken cicatrix, and his fifth was a sunken nose; and each of them gave an excellent result.

In 1900 he published these five cases, with suggestions for further uses of paraffin. It might be used, he said, to raise the cheek after the removal of the upper jaw; to fill a cavity in bone after operation for necrosis; to make good a defect in the brain; to obtain a movable joint after resection, by filling the space between the ends of the bones with paraffin till a sort of capsule was formed, and then letting the paraffin work out through a small incision; to support the weight of the blood in varicose veins, by making a firm swelling of paraffin round a vein; to cure incontinence of faeces, or incontinence of urine in the female, by injecting paraffin under the prolapsed mucous membrane; to keep back a hernia that could not be kept back with a truss; and to conceal the flatness of the chest wall after the removal of the breast. Some of these suggestions may sound extravagant and beyond good surgery; but Gersuny had already reported, in 1900, a successful case in which he had cured, by his method, a case of incontinence of urine in a woman who had undergone seven operations for vesico-vaginal fistula, and all of them in vain.

Then, came a disastrous case. On November 23rd, 1900, Pfannenstiel used this method on a woman suffering from prolapse of the bladder, with vesico-vaginal fistula, after an operation for cancer of the vagina. He chose a paraffin having a higher melting point (115°) than Gersuny's (104°); he injected no less than 30 c.cm., all at one time, into the loose sub-mucous tissue of the prolapse; he gave no anaesthetic, and he sent the patient straight back to the railway station. It is no great wonder that on the way there she had pulmonary embolism. She recovered, but this disaster hindered the general adoption of the method. Moreover, she was not in any way improved; the prolapsed mucous membrane had been left unreduced after injection, and, though the opening

Fig. 1.—A case of injury, followed by caries and perforation of the septum. One injection under an anaesthetic; two subsequent injections, each of a few drops, under cocaine.

into the bladder was narrowed, the incontinence of urine was as bad as ever.

Kapsammer, in February, 1901, reported 3 cases of incontinence of urine in the female, all cured by the injection of paraffin; in 1 it had been due to vesico-vaginal fistula, in 1 to cystitis, and in 1 to simple weakness of the bladder, made worse by a recent labour.

Then in June, 1901, came Moskowitz's paper, giving an account of more than 30 cases treated by Gersuny and himself in Vienna. These cases cover a very wide range of surgical practice; they include the narrowing of clefts and fistulae, the filling up of cavities, the keeping up of prolapsed mucous membrane, the keeping back of herniae which came down under a truss, the removal of small-pox marks, the prevention of reunion of a nerve divided for the cure of neuralgia, the raising of the cheek after removal of the upper jaw, and the remodelling of nine noses. In all these 30 or more cases there had been no disaster, and the great majority had been successful: but in one or two of them there is room for a faint suspicion that the patient would have done better with less paraffin. For instance, there are 2 cases where the injections were used to occlude a hernial ring, and then a truss was immediately applied, before the paraffin had fully set; and some of it in each case found its way into the scrotum, and set there. Also there is a case of defective speech after closure of a cleft

Fig. 2.—A case of injury in early childhood. One injection, under an anaesthetic.

palate, where the surgeon, to narrow the space between the palate and the back of the pharynx, made injections under the pharyngeal mucous membrane; he did at last succeed, but the treatment extended over a year, and he used no less than 60 c.cm. of paraffin. But, after full allowance is made for the excessive use of a new method, there remains a very long list of excellent results; especially the occlusion of faecal fistulae, and the holding up of prolapses of the bowel, or the vagina, or the uterus; and in some of these most miserable cases the ordinary operations had failed again and again.

What are the dangers of this method? Certainly, there is no fear of poisoning. Paraffin, properly selected and sterilized, is absolutely incapable of doing any harm as a drug. This fact has been proved a hundred times over, both by Stein's experiments on animals and by surgical experience.

There is no risk of suppuration, or of sloughing, which may not be avoided with almost absolute certainty by careful preparation and sterilization, and by the use of the right sort of paraffin. Once and again, as in the general operations of surgery, suppuration has occurred; and it is said that a case of sloughing has occurred, but I have not found the original reference to it. Apart from the use of paraffin too hot, and apart from the use of an excessive quantity of paraffin, there is no more risk of these troubles than in any other operation.

What is the risk of embolism? I have searched through a great many English, American, German, and French journals,

Fig. 3.—A case of disease, with perforation of septum. One injection, under an anaesthetic. A subsequent injection is still to be made.

Fig. 4.—A case of injury. One injection, under an anaesthetic.

and have found three cases recorded. One of them was Pfannenstiel's, where a very large quantity of paraffin was injected, and the patient was not kept at rest. One, a similar case, is said to have happened in Vienna; but I cannot find the original reference. In the third case, loss of vision in one eye followed the injection of paraffin under the skin of the nose; it was due, probably, to direct wound of a vein with the needle. Here, again, I cannot get at the original reference, or learn whether the amaurosis became permanent. Of course, it is possible that other cases have occurred, and have not been recorded; but, considering the novelty of the method, and the division of opinion between those who use Gersuny's paraffin and those who use Eckstein's, it is not likely that a case of embolism would easily escape the

Fig. 5.—Congenital; no history of injury or disease. One injection under an anaesthetic; one under cocaine.

with a high melting point. Cases of embolism have occurred now and again after the subcutaneous or intramuscular injection of mercurialized oils for the cure of syphilis; these could not be due to heat. Professor Comstock, of Minnesota, has made a number of experiments on rabbits, and has found that death from embolism occurred in cases in which the paraffin had a melting point equal to, or rather lower than, the normal temperature of the animal; but no embolism occurred in any case where a paraffin with a higher melting point was used. Here again the embolism could not be due to heat. On the other hand, the use of a very hot injection, after the method of Eckstein, causes a good deal of local inflammation; it might fairly be called a slight subcutaneous burn,

Fig. 6.—The same case as Fig. 5.

Fig. 7.—A case of disease. One injection, under an anaesthetic.

comment of surgeons. We may fairly believe that the risk of embolism, if every precaution be taken, is not more than 1 per cent., even in those cases where the injection is made into the loose and vascular submucous tissue of the rectum or the vagina; and that it is practically nil, if the injection be made under the skin of the nose, or under a depressed cicatrix.

But we must look at this question of embolism more closely. What do we mean when we say that the injection of paraffin may be followed by embolism? Do we mean that a vein is wounded, and that the paraffin is injected into it, or that the paraffin is in some way absorbed into the circulation, or that the heat of the paraffin causes coagulation of the blood in the veins round it, and that these coagula get loosened and carried into the circulation? This is a practical question, for it concerns our choice between a paraffin with a low melting point and a paraffin

Figs. 8, 9, 10.—Three cases, before treatment, of disease, or of congenital defect of development. A very considerable improvement has been made in 8 and 9, and a slight improvement in 10. But the photographs are rather intended to illustrate the special difficulties that occur in some of these cases, for example, the splaying out of the nasal arch, the breadth and coarseness of the tip of the nose, the presence of cicatrices, the elongation of the upper lip, and the want of room between the forehead and the tip of the nose.

and if embolism were to follow the injection of Eckstein's paraffin, it would probably be due to its heat; but so far as I can find, no such case has occurred.

The experiments of Juckoff and of Comstock, and the fact that the paraffin, in Gersuny's first case, did seem to soften during an attack of fever, and the fact that embolism has sometimes followed the injection of mercurialized oils, make it advisable to use a paraffin with a melting point above "fever heat," but not hot enough to burn—say a melting point of 106° to 115° . Certainly 106° is high enough for injection into the loose and vascular tissues of a prolapsed bowel or vagina. But I have no experience of this kind of cases; all my cases have been nose cases, and of these—thanks mostly to the doubtful blessing of paragraphs in the papers—I have had twenty-two. What I have to say, therefore, concerns the remodelling of sunken noses, and that only.

For the earlier cases I used Eckstein's paraffin, which melts at the very high temperature of 136° . I took it for granted that the latest modification of the treatment would be the best, and I gave it a very thorough trial in more than 12 cases. I am absolutely sure now that Eckstein's paraffin is without any real advantage. It is very difficult to handle, it sets very rapidly, it causes a great deal of swelling and some inflammation, and may even produce some discoloration of the skin; and it yields no better results than Pfannenstiel's paraffin, which melts at 115° . This I think is almost perfect—easy to inject and easy to mould, and not too hot, and setting perfectly hard. Lately I have been using a mixture of two paraffins, which melts at 111° ; this also is excellent.

I hesitate to do what better surgeons are doing, that is, to use Gersuny's original mixture of paraffin and vaseline, for the following reasons. I am not sure that it might not give way a little under the influence of continued high fever, or continual exposure to tropical sunshine. These fears may be stupid, but there is another reason—that the skin of the nose exercises immediate and very heavy pressure on the paraffin injected under it. To meet and stand this tremendous strain, you want a paraffin that sets fairly quick and absolutely hard. You have to hedge between a paraffin that may be a little too soft and a paraffin that may be a little too hot. I do not deny for a moment that other surgeons have obtained as good results as mine, or better, with Gersuny's paraffin; only I feel safer and more confident, working with one that melts at or near 110° F.

Now comes a most important point. When paraffin sets it shrinks; and the hardest paraffin shrinks the most. Always, I think, you can observe this shrinkage, a few hours after the injection. It is very slight, and in some cases it is only just visible. It is not enough to be an argument in favour of a softer paraffin, and it is not enough to justify the surgeon in injecting more paraffin than is necessary because it will all shrink a little. But it does in some cases, and I think in the majority of cases, involve the "touching up" of the nose, a week or ten days later, with a few drops more. This touching up, of course, does not require an anaesthetic; a little cocaine is injected, and a place is made for the extra drops of paraffin with a tenotomy needle.

With regard to a syringe for these cases, I think that none of those now in use are absolutely perfect; but I have not had any experience of the syringe with which Mr. Walker Downie has produced such excellent results; only, his plan of keeping the needle hot by a platinum wire connected with a storage battery seems to me unnecessary. I have used many syringes—an ordinary antitoxin syringe, a Schleich's infiltration syringe, a syringe made by Messrs. Mayer and Meltzer, having the proximal part of the needle jacketed with a thick coating of copper, which retains its heat well and transmits it to the tip of the needle; and an Eckstein's syringe. This syringe is jacketed with indiarubber, and so is the proximal half of the needle; it is easily worked with one hand, and there is a screw nut on the piston which prevents all risk of paraffin going in with a jerk; the needle is long and curved near the tip. This is the best syringe that I have used; it keeps its heat well, it takes only one hand, and it cannot inject too much paraffin. Its needle is too long and not sufficiently rigid, but this is easily altered.

Of course before the injection is, made everything is prepared as for an operation. The paraffin and syringes—it is best always to have two syringes, in case one gets out of order—are kept in a water bath 6° or 7° above the melting point. A general anaesthetic is given. The skin is nicked for the needle; 5 or 6 c.cm. of the paraffin are taken up, and the syringe is held in the water bath while the screw-nut is adjusted; then the needle is dipped for a second or two into boiling water. It should not be passed through the flame of a spirit lamp, for this method burns and stains the paraffin in it.

An assistant keeps up very firm pressure all round the nose, making his fingers and thumbs meet in a ring, and it may help him to have a strip of soft metal under them. The needle must be put well under the skin, a little to one side of the middle line, below the point where the bridge ought to be, and directed upward. The injection should be made at or about the rate of 1 c.cm. every ten seconds. The paraffin begins to set in less than a minute, but it remains doughy for about a-quarter of an hour. The moulding must be done pretty vigorously; the surgeon must not be afraid of pushing and squeezing the nose into a good shape, and he must not leave off till the paraffin is absolutely hard and unimpressionable. Then the patient is put back to bed and a cold

compress is lightly laid over the face, and, as soon as he comes out of his anaesthetic, a hand-glass is given to him, and he is told to look after himself and to give his nose a gentle moulding now and again during the next few hours. At one time I used to apply a Walsham's external nasal splint immediately after the injection; but I gave it up because I realized that the apparent slight settling down of the paraffin was due simply to its shrinking, which cannot be prevented.

What happens, ultimately, to the paraffin? Is it encapsuled like a bullet, or is it, like a sponge-graft, replaced, particle for particle, by granulation cells, and finally, by tough fibrous tissue? So far as I can learn by reading, the very hard paraffin used by Eckstein becomes encapsuled; the paraffins that melt at a point from 104° to 110° or 115° are slowly, very slowly, replaced by fibrous tissue. The idea that this molecular absorption can give rise to any embolism, such as the fat embolism that may follow a fracture, is absolutely without evidence.

I come now to what I have learned not by reading but from my own cases. I have taken every case that came to me, except one that was too trivial for treatment. I have had no disaster; but, in one case, a slight suppuration occurred, many days after the injection; and in two cases the line of puncture broke down, and gave rise to a slight discharge. In one case the patient, while still under the influence of the anaesthetic, suddenly rolled over on to his face in bed and some of the paraffin was displaced. In a few cases—but only in a few—some reddening of the skin has followed the injection, and in a very few this reddening has been very slow to fade. And, of course, one gets more skilful with more experience, and able to avoid any uneven distribution of the paraffin. But the fault in those cases that have not been altogether satisfactory is not wholly mine: some of it is to be attributed to the use of Eckstein's hot and rather unmanageable paraffin, which is, I am sure now, in no way superior to a paraffin that melts 25 degrees lower.

In two cases the nose was not only sunken but crooked, and had to be straightened before injection with a Walsham's forceps. In several of them, the septum had been destroyed more or less by caries; but these perforations of the septum have very little effect, if any, on the success of the treatment. In one, a very bad case of old syphilitic necrosis, the skin was scarred and adherent, and had to be freed with a tenotomy needle; but, unless there be this rigid and puckered cicatrix, there is no need to use the tenotomy needle; the paraffin raises the skin easily and evenly. In one or two of the cases the quantity injected was very small, not more than 1 or 2 c.cm., yet a great improvement was made. The average quantity for a badly-sunken nose is 7 or 8 c.cm., and it is better to use too little than too much.

A surgeon can always find some fault, if he likes, in every operation that he does; I have never made a perfect Greek nose, and perhaps I never shall. In some cases the nose is so short and squat that you cannot do much good; there is no room between the forehead and the upper lip for a Greek nose. Do what you will, you cannot achieve much success, and you dare not run the risk of making the nose look almost grotesque. In some cases the lower end of the nose is very coarse and heavy, and you cannot make it narrow and refined. Looking back over my twenty-two cases, I can find some slight fault or defect in every one of them, either avoidable or unavoidable.

Still, the general results are very good. You cannot promise to any patient a pure Greek profile, but you can promise a fairly good profile, that shall at least be straight enough to be unnoticeable. You can raise and mould the skin between the eyes, making this part of the nose quite good-looking, even though it has been, for a quarter of a century or more, absolutely flat and ape-like; and by doing this you improve the look of the eyes, and make the whole face look different, more intellectual and less stupid, more spiritual and less animal. You can, by raising the middle portion of the nose, slightly lengthen the nose, and at the same time you slightly depress the tip of it, so that the nostrils look more downward and lose their ugly forward aspect. Altogether you can accomplish a change that may fairly be called wonderful. The photographs show results of average success: and in every case some days elapsed after the operation, so that the shrinkage of the paraffin is shown. Of course one wants skilful assistance; and I am deep in the debt of Mr. Aubrey H. Pollock, my house-surgeon; Dr. Shuter, anaesthetist to the West London Hospital; and Mr. H. P. Noble, anaesthetist to the Middlesex Hospital.

NOTE.

Since this lecture was given, I have done four more cases, making twenty-six in all. One of these four cases was the hardest I have yet had; and I have failed, even with two operations, to do much good. The nose had been absolutely flat for half a century, and the skin was almost hopelessly rigid: and a preliminary use of the tenotomy knife caused some bleeding. Happily, I have done no harm, and some good; and shall be able to do more, a few weeks hence; but it is a disappointing case. Such intense tightness and unyielding rigidity of the skin are altogether exceptional. To sum up—I have had twenty-six cases without death or disaster; and the general results are very good. In nine cases out of ten, the surgeon can be sure of making a very great improvement; but he may not be able to do it all at once. He cannot make perfect noses; but he can make the patients good looking enough to be happy instead of miserable, and able to get work, to get married, and to go about without being ridiculed, pitied, or suspected of syphilis. Only let nobody think that the method is so easy as it sounds. It is full of little difficulties; it wants experience; and it involves very grave responsibility.

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THE NOMENCLATURE OF MALARIA:

A SUGGESTION.

By LIEUT.-COLONEL DAVID BRUCE, R.A.M.C.

1. It would seem that the time has arrived when the diagnosis of cases of malaria must aim at giving the name of the species or variety dealt with, and not merely one of the general terms—intermittent or remittent fever—as laid down in the last edition of the *Nomenclature of Diseases*.

2. Information is wanted as to the geographical distribution of the various kinds of malaria, and this can only be arrived at by recognizing them in the new edition of the *Nomenclature*.

3. The demonstration of the species of malarial parasite which is the infecting agent in a particular case will necessitate the use of the microscope. This routine microscopical examination of the blood will, it may be presumed, bring about a more correct diagnosis of fevers in malarious countries, and assist towards rational treatment. Malta fever was treated until lately with large doses of quinine on the supposition that it was malarial in origin. In the same way it is too often assumed that any fever occurring in a malarious locality is malarial in character, and quinine is given in enteric fever, tuberculosis, liver abscess, etc., when a blood examination might have prevented the error.

4. The nomenclature I would suggest for the three well-recognized species of malaria is the following:

Malarial Fever.—Synonyms: Ague, intermittent and remittent fevers.

(a) Tertian synonyms: *Haemamaeba vivax*, simple or benign tertian.

(b) Quartan synonyms: *Haemamaeba golgii*.

(c) Crescent tertian synonyms: *Laverania laverani*, aestivo-autumnal fever, malignant tertian, tropical tertian, remittent fever.

I have left out the commonly used terms, simple, benign, malignant, pernicious, as they are misleading. The so-called simple tertian may often be more severe than the so-called malignant tertian. Aestivo-autumnal is a term which may apply appropriately enough to the fever as it occurs in Italy, but in other parts of the world is unsuitable.

The genius of Koch suggested the term tropical tertian for the third variety, and this is undoubtedly an excellent name, but as the fever is also found in temperate climates it is also misleading.

In regard to the scientific names I think Golgi, who discovered that the parasite of malaria consisted of more than

one species, should be commemorated, and also Laveran, whose epoch-making discovery of the malarial parasite has, it seems to me, never been sufficiently appreciated in this country.

In the present edition of the *Nomenclature of Diseases* the old term malarial cachexia has been left out. I would propose that in the next edition the chronic form of malaria when the parasites have disappeared from the blood, but the anæmia, pigmentation, enlarged spleen, etc., remain, be again given a place, and I would put forward the name:

Chronic Malaria.—Synonym: Malarial cachexia.

This short note has been written in order that any one who takes an interest in this question may have the opportunity of bringing forward other suggestions or criticisms.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

PRELIMINARY NOTE ON A PHASE IN THE LIFE-HISTORY OF BILHARZIA HAEMATOBIA.

DURING a fairly exhaustive examination of the literature upon the life-history of bilharzia haematobia we have found no reference to an appearance we have several times met with in the larvae. It is that in the case of certain larvae, while still living, there occurs the formation of spheres with double contour and provided with long cilia. These spheres show intense vibratile movement of granules in their protoplasm, and although the cilia have usually been motionless, they have been seen by us in active movement. These spheres are able to carry on an independent existence. Non-ciliated spheres have already been described by many authors and we have repeatedly seen them, but the ciliated forms to which reference is made above are absolutely distinct therefrom. We hope to make a full communication on the subject at an early date.

W. S. LAZARUS-BARLOW, M.D., F.R.C.P.
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PURPURA HAEMORRHAGICA FOLLOWING SEA BATHING.

THE following case is of interest owing to the sudden and severe onset of this disease in a boy who had had perfect health up to the time of his taking his first sea bath.

On July 17th, W. R., aged 5 years, was brought to me for treatment. He was suffering from vomiting, severe pain in the lumbar region, and a slight petechial rash—not more than a dozen spots, chiefly on the chest. Examination of the heart, lungs, and kidneys revealed nothing out of the normal. The temperature was 101.2° F. The day previous he had bathed for the first time, being then in perfect health. The above symptoms commenced the same evening. The following day, however, boy became anaemic, there was a haematoma in the left popliteal space the size of an egg, and a large ecchymosis 2 in. in width extending on the abdomen from the umbilicus to the pubes. There were other ecchymoses varying in size on the legs and arms, and on the inner side of the cheeks and lips. The temperature was normal. The urine, which was scanty, contained blood, as did the motions. A slight systolic murmur was heard in the left axilla.

I diagnosed the case as purpura, and treated it with absolute rest, light milk diet, and gave a mixture of dilute sulphuric acid. No fresh symptoms occurred until a week later, when I was urgently summoned. The whole left side of the body was convulsed, though the patient was conscious. The temperature was 105.5° (taken with two thermometers); the pulse was 130, and occasionally intermittent; respiration appeared practically normal. The ice-pack was used to the head, and the body sponged with ice water, and an enema of castor oil and glycerine given. Six hours later the temperature was 99.2°, and the convulsive movements gradually ceased; and though convalescence was delayed for two months, he having several relapses with more or less severe subcutaneous haemorrhages, he recovered, and at the present is back at school. Only yesterday, however, I was informed that he had cut his finger very slightly, but it had continued to bleed for two hours.

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