Post-mortem Examination.—Body well developed, but markedly wasted. No signs of congenital syphilis. No enlargement of glands, no haemorrhages, no oedema. Marked jaundice of entire skin, conjunctivae, and all the internal organs. The pericardium was healthy. The heart weighed $\frac{1}{2}$ oz., and was healthy. The pleurae were healthy. Each lung weighed $2\frac{1}{2}$ oz., and exhibited small areas of collapse along the posterior surface, but otherwise was crepitant throughout. No ascites, no peritonitis, no enlargement of mesenteric glands, but a few enlarged dark-coloured glands at the hilum of the liver. The stomach and intestines presented nothing abnormal. The spleen weighed 1 oz., was firm and enlarged. The kidneys each weighed $\frac{1}{2}$ oz., and with the suprarenals appeared normal. The ureters, bladder, uterus, and appendages were healthy. The pancreas appeared small, somewhat shrivelled, and tough. The liver weighed 7 oz. It was dark olive-green in colour, and its surface was roughly granular, like morocco leather. To section it was very tough, and obviously markedly cirrhotic. The gastro-hepatic omentum was dissected with the greatest care, and the hepatic artery and the portal vein were traced to both lobes of the liver, but no signs of a common bile duct could be found, not even a fibrous band passing from the gall bladder to the duodenum. The ductus venosus was traceable, connecting the portal vein and the round ligament. In the fissure of the gall bladder there lay a whitish wrinkled tube $\frac{1}{8}$ in. in diameter and $\frac{1}{2}$ in. in length. Its free end (the fundus) was somewhat bicornuate, and did not reach the anterior margin of the liver by $\frac{1}{2}$ in. The opposite end was continuous with a dark-coloured ovoid swelling which lay in the transverse fissure. On splitting longitudinally the narrow whitish tube it was found to be divisible into two nearly equal lengths. The anterior half was smooth lined, the posterior half showed spiral foldings of the mucous membrane, and the suggestion forced upon one was that the former represented a rudimentary gall bladder, and the latter the cystic duct. The wall of this tube throughout its length was thick, and it contained clear, yellow-tinged, thin fluid. The dark-coloured ovoid swelling above mentioned lay in the transverse fissure, and appeared to be continuous with the whitish tube. It was $\frac{1}{2}$ in. long, and $\frac{1}{4}$ in. in width, ovoid in shape, and dark green in colour. Its wall was thin, and it was distended with a viscid green-coloured fluid quite different to the contents of the whitish tube. Its interior was smooth lined and was coated with a green slime. No communication existed between this ovoid swelling and the whitish tube. Its true inferior surface was free, its superior surface inseparably associated with the hepatic tissue in the transverse fissure. Possibly this may have represented a rudimentary hepatic duct which had failed to communicate with the gall bladder.

On opening the duodenum two well-marked papillae (a small and a large one) were present opposite to the head of the pancreas. Bristles could be passed into these for about an eighth of an inch towards the pancreas. They were the openings of the pancreatic duct into the duodenum.

The liver, spleen, and pancreas were sectioned, and examined microscopically. In all these organs the characteristic feature was the large amount of fibrous tissue present. There was, however, a great contrast between the condition of the bile ducts and that of the pancreatic ducts, and this contrast is well brought out by the excellent photomicrographs so kindly taken for me by Dr. John T. Hewetson.

The liver shows fibrous bands of enormous thickness permeating the entire organ. They are entirely interlobular, for nowhere do they extend into the lobules. The striking feature of these fibrous tissue strands is the enormous number of bile ducts they contain cut in every direction, some longitudinally, others transversely. For the most part the lumina of these ducts are conspicuously absent, but here and there they may be seen as spaces filled with inspissated bile readily distinguished by its bright green colour. The cells lining the lumina are low cubical in type, and show well-stained nuclei. There is, however, a great contrast between these cells and the cells corresponding to them in the pancreas. In the pancreas they are columnar in shape, regular in their distribution, and enclose a widely-open lumen, while in the liver they are more or less cubical in shape, more irregularly disposed around a lumen which is everywhere narrow and in many places obliterated.

Sections of the pancreas show healthy acini, well-marked islands of Langerhans, and well-developed ducts. These ducts are lined by columnar epithelium with well-stained nuclei. They are, however, seen to be embedded in conspicuous strands of fibrous tissue which is moderately cellular in structure. The lumina of the ducts are large and patent, and appear quite normal.

In the spleen the trabeculae are represented by dense fibrous strands. The pulp and the Malpighian bodies appear quite normal.

In concluding my account of this case, I wish to acknowledge my thanks to Dr. G. W. Powell for his permission to publish it, to Dr. A. E. R. Weaver for his excellent drawing of the liver, and to Dr. John T. Hewetson for the photomicrographs of the microscopic sections.

The bibliography on this subject will be found at the end of John Thomson's article in Allbutt's *System of*

Medicine, vol. iv, p. 257; and further references will be seen in a paper by Rolleston and Hayne in the *BRITISH MEDICAL JOURNAL*, vol. i, 1901, p. 758; and in Rolleston's *Diseases of the Liver*, p. 639.

THE RINGWORM QUESTION IN ELEMENTARY SCHOOLS.*

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SINCE January this year some 195 cases of ringworm in children have come under my care at the West London Hospital, Hammersmith, and 69 at the Hospital for Diseases of the Skin, Blackfriars, making a total of 264; 89 of these had not recently been attending school, some being under school age, while others had been kept away from school for a considerable time before coming under my notice. In a few cases, no doubt by inadvertence, no note was taken in the hospital casebook in reference to the school attendance.

The schools which the children had attended up to the time of coming to the hospital, or up to a short time before, were noted in 175 cases—125 at the West London Hospital, and the rest at the Hospital for Diseases of the Skin. Each of the hospitals serves a wide area; the cases at Hammersmith come from 49 county council and other elementary schools, and those at Blackfriars from 41. Several of the individual schools have furnished within the period more than one case—for example, Brackenbury Road School no less than 8, St. John's, Hammersmith 7, St. Dunstan's 6, Fulham Palace Road 6, the British School, Brentford, 6, and William Street, Queensmill Road, and Sacred Heart, 5 each; but the majority of the schools in my list are each responsible for only one or two of my cases.

It is, of course, obvious that the cases of ringworm from these ninety schools, which have come under my personal notice within the period of six months, represent but a small proportion of the total number of the school children with ringworm; many of these, no doubt, go to other hospitals and dispensaries, and many of them to the general practitioners of the neighbourhood.

The figures which I am able to bring forward from my individual experience are, however, in themselves enough to show (1) how widely spread the disease still is among the metropolitan school children, and (2) what a large number of elementary schools now are, or have recently been, contaminated by ringworm. I may here state that many of the patients at the time of coming under my care were really bad cases, the disease having existed and remained undetected by the school teachers and nurses for a considerable time.

It may perhaps be asked by those who are satisfied with the existing state of affairs what proof there is that these children acquired the ringworm at the schools. I freely admit that some of them may have contracted it elsewhere, but there is no getting away from the fact that all of them had been attending at the schools, often for weeks or even months, without detection; and every one conversant with the disease and with the usual conditions of school life will admit that they must all of them have been sources of infection for the other children. I have no doubt myself that in the large majority of the cases the mothers were quite right in saying that the ringworm had been "caught at school."

Many years ago, and again in 1905, in a paper read before the Royal Institute of Public Health, I pointed out the inadequacy of the measures adopted by the authorities against the spread of ringworm and other contagious diseases of the skin in the elementary schools, but as far as I can judge from the cases that are still coming under my notice at the two hospitals, there does not seem to have been much improvement since then, in spite of the fact that the Education Department of the London County Council has to a certain extent increased its medical staff. I further venture to say that it is not likely that we shall see much improvement until the medical inspection of school children becomes a reality,

* Read at the International Congress of School Hygiene, London August, 1907.

until periodical and frequent examinations of the children are carried out by specially-trained medical men—not by semi educated nurses—and until all suspicious and doubtful cases are at once submitted to competent experts. It may be easy enough for a nurse, or any one else who has seen a few cases, to “spot” an ordinary case of ringworm, with its patches of stumps or broken hairs, but every dermatologist knows how frequently old-standing cases come before him which have been wrongly diagnosed—even by medical men—and mistaken for eczema, seborrhoea, etc., or are supposed to be “cured,” because there is hair all over and only a little scurf to be seen; cases, indeed, the true nature of which can only be made certain by skilled microscopical or cultural investigation. Not only do I contend it to be the duty of the authorities to adopt efficient measures, which is a matter quite feasible, for, preventing, to a great extent at least, the contamination of healthy children who are forced to attend the elementary schools, but I further submit that the responsibility of the treatment of an unfortunate child who has presumably contracted a contagious skin disease at a Government school should also be undertaken by the State. It is, in my opinion, a cruel thing to force a child to go to a school where ringworm is known to exist, and then to saddle the poor parents with the expense and trouble of the subsequent treatment of the disease contracted at that school. It may be said that such children might be taken to the neighbouring hospitals for treatment, and so many of them are, but this also means trouble and expense, loss of time and wages for the family, as well as trouble and expense to the hospitals, to whose funds I am not aware that the county councils ever contribute.

It is, no doubt, mainly a question of expense. A few years ago, perhaps, ignorance, supineness, and penury in such matters might all have been laid to the charge of the School Board; but at the present day, and considering the enlightened interest the officers of the Education Department are taking in this International Congress, it is to be hoped that the lay authorities will come to realize the importance of the subject and to see that economy ought to be practised in less essential matters than the prevention of disease.

A great deal that I have said in reference to ringworm in schools may equally be said in regard to pediculosis and some other objectionable and preventable contagious diseases of the skin. I once, in conjunction with Dr. Alder-Smith, examined the heads of a large number of children in two London Board Schools; we found that only 2 per cent. of the girls' heads were free from pediculi or their ova. I do not think that this appalling proportion of infected heads is at the present time quite so great; but I am sure that a very large number of the children now attending the metropolitan elementary schools are so infected, and that there is still strong probability of any clean child attending these schools soon becoming in a similar condition. Not only do they contract the pediculi by close association in the class rooms, passages, and play grounds, but also through their hats, which are hung in the ante-rooms one over the other and closely together.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL.

TRANSPLANTATION OF THE URETERS.

ANOTHER operation of extraperitoneal transplantation of the ureters into the rectum for extroversion of bladder, performed in an exactly similar fashion to that in the case reported by me in your columns on June 22nd, p. 1481, was performed in this hospital on a boy of 13 years of age on April 15th of this year.

The patient made a good recovery, and was discharged from the hospital on the 15th of the following June.

For three weeks before the date of discharge from the hospital he was able to retain urine in his rectum from three and a half to four hours during the waking hours, that is, from 5 a.m. to 9 p.m. During the sleeping hours he was able to retain urine in his rectum from 9 p.m. to 5 a.m.

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DIURETIC ACTION OF THEOSINE SODIUM ACETATE.
A DRUG which seems likely to take a prominent place among useful remedies is theosine sodium acetate. Its effect in the first case in which I employed it was striking, not to say dramatic.

The patient—a girl aged 13—was admitted into hospital with advanced aortic and mitral disease. She had been an in-patient of mine on three previous occasions, and, with the help of rest and digitalis, had each time been enabled to leave the hospital comparatively well. On her fourth admission she was so bad that I had little hope of her recovery. Dyspnoea was urgent: the heart was beating tumultuously, and the apex could be felt almost as far outwards as the axillary line; there was marked pulsation of the liver, the lower extremities and abdominal walls were anasarcaous, and considerable ascites was present.

The patient was put on digitalis, but this drug by itself did not seem to do any good. As the abdomen continued tense and there was considerable impediment to the descent of the diaphragm, paracentesis was resorted to, and 140 oz. of fluid were drawn off. A fortnight later the same amount was again removed, and the operation was repeated on ten other occasions—that is, twelve times in all—at intervals of a fortnight, the average amount of fluid removed each time being 140 cz.

When the thirteenth operation was done, the patient was almost moribund, and she begged that she might be tapped again, in the hope of getting relief from the distressing dyspnoea. It was then that the house physician, Mr. Hayes, conceived the idea of trying the effect of theosine sodium acetate. He accordingly ordered 5 grains to be taken every four hours. The first dose was given at seven o'clock in the evening. The effect was magical. During the night enormous quantities of water were passed, and by the next morning the whole of the anasarca had disappeared from the lower extremities, while not a trace of ascites remained. The patient could now breathe quite comfortably, and scarcely recognized her own anatomy, making display of the fact that she could easily put both her legs into a stocking which the day before could with difficulty be drawn on one leg.

During her stay in the hospital she had been taking digitalis on and off, and at the time of administering the theosine salt she was having five drops of the tincture thrice daily. I therefore tried the effect of leaving off the digitalis and keeping her on the salt alone. Directly this was done the fluid began to reaccumulate, and the same thing happened when the salt was left off and the digitalis given alone. Hence it was obvious that the copious diuresis and concomitant subsidence of the dropsy were due to the combined action of the two drugs. Theosine salt, to be effective, needs to be given with a cardiac tonic, such as digitalis. This has been my experience in all the cases in which I have given it. The patient soon after beginning this new treatment was able to walk about the ward, and in a few weeks to leave the hospital. Under the influence of digitalis, with the occasional addition of theosine, she remained for several months in better health than she had enjoyed for some time. She was then readmitted into hospital with pericarditis, to which she succumbed; but it was remarkable that throughout the whole of the illness she remained entirely free from dropsy.

I have now employed the theosine-digitalis treatment in several cases of cardiac dropsy, both in hospital patients and in others seen in consultation, and each time with the same result, although it has not always been so striking as in the above instance. I therefore feel some confidence in recommending this treatment in all cases of genuine cardiac dropsy. When, however, there is primary blockage in the lungs, as in chronic bronchitis with extreme emphysema, it is less efficacious. In the dropsy of parenchymatous nephritis the theosine salt has in my hands proved useless, but in the cardiac dropsy attending the final stage of granular kidney its diuretic action is eminently satisfactory. On the ascites occurring secondarily to primary portal obstruction the salt appears to have no effect.

A word as to the administering of the drug. It is a white powder, and may be given in cachets in doses of from 3 to 8 grains every four hours. Its effects should be carefully watched, as it is apt to irritate the stomach. This is, indeed, its chief drawback as at present administered.

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