intestines were collapsed. The liver showed a state of mild cirrhosis; on microscopical examination there was found an increase of fibrous tissue around the bile ducts, with partially obliterating endarteritis of the vessels. The spleen, uterus, and appendages were normal, but the kidneys were slightly granular. There was a typical broad-ligament cyst on the right side, of irregular shape; it passed across the bladder, with a small protuberance causing the apparently separate mass on the left side. On section it proved to be an innocent multilocular growth, with papillary proliferations.

This case has several features of interest. The muscular effort which ruptured the heart must have been very slight, as the patient was lying in bed. She was by no means a nervous woman, and was perfectly willing to be operated on for her condition. The right ventricle is said to be affected in only one quarter of these rare cases of rupture of the heart, the left ventricle being the usual chamber involved. The slight degree of precordial pain, and the comparatively long duration of life after rupture, due, no doubt, to its small size, add interest to a very unusual case.

My thanks are due to Dr. S. W. Curl for permission to publish this case, and for his help in compiling these notes.

TREATMENT OF RINGWORM BY THALLIUM ACETATE.

BY

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SINCE reading the report in the *BRITISH MEDICAL JOURNAL* of February 19th (p. 329), I have taken the opportunity of investigating the treatment of ringworm of the scalp in children at the Withington Hospitals, by the internal administration of thallium acetate. The cases were taken at random among children up to 5 years of age, no consideration being given to the extent or duration of the disease.

In all cases the urine was ascertained to be free from albumin, albuminuria being a contraindication to the use of the drug, and in all cases a positive spore test had been returned before treatment.

The dose of thallium acetate given was $\frac{1}{8}$ grain per $2\frac{1}{2}$ lb. of body weight, irrespective of age. The drug is easily soluble, and was made up in sweetened water and administered in a single dose. No constitutional symptoms were observed after the administration of the drug, nor yet in the case of one child who received a second administration six weeks later. No local treatment was applied to the scalp, but the head was covered to prevent loose hairs being a source of infection to other children. The shedding of hair commenced between the fourteenth and sixteenth days. The hair could then easily be pulled out without causing any discomfort, and it also came off in the caps. The shedding was in every successful case complete in from three to six days. The very short stumps were found to be loose, and were readily extracted by application of adhesive plaster for a few minutes. The action of the drug was entirely selective to the hair of the scalp.

In all cases a roughness of the extensor aspects of the forearms and of the outer side of the legs was observed about the tenth day after the administration. After the shedding of the hair dermatitis of the scalp occurred in several cases, but yielded to treatment by zinc ointment in the course of a few days. The new hair commenced to grow almost immediately.

Case 1.—A boy, aged 4 years, presented several patches of ringworm of the scalp; he had been treated for over six months by various local applications. The child's weight was 2 st. 2 lb. 12 oz., so 1.7 grains of thallium acetate was given on March 22nd. Epilation commenced on April 6th (sixteen days after) and was complete in six days. He has now quite a fair crop of hair, and spore tests from different parts of the scalp are negative.

Case 2.—A child, aged 1 year 8 months, weighing 1 st. 8 lb. 2 oz., was given 1.23 grains of thallium acetate; the shedding of hair began on the fifteenth day and was complete in five days.

Case 3.—A child, aged 2 years and 8 months, weighing 1 st. 13 lb. 6 oz., was given 1.52 grains of thallium acetate; the shedding of hair began on the fifteenth day and was complete in five days.

In Cases 4, 5, 6, and 7 shedding of the hair commenced on the fourteenth day and was complete in three days. Photographs of one of these cases are reproduced; the age of the patient was 3 years and 6 months, and he weighed 2 st. 3 lb. 4 oz. A dose of 1.74 grains of thallium acetate was given on April 23rd, and the

shedding of the hair commenced on May 6th. In Case 8 the child, aged 2 years and 4 months, and weighing 1 st. 12 lb., was given 1.5 grains of thallium acetate. The shedding of hair commenced on the sixteenth day and was complete in six days.

Out of the first ten cases two were unsatisfactory; one was a failure for which I cannot account, as shedding of the hair occurred only very slightly, and the other was unfortunately given an underdose, and shedding of the hair was only partial.

The results of these few cases suggest that there is wide scope for the use of thallium acetate, especially in children under the age of 3, where x-ray epilation is inadvisable.

I have to thank Dr. Gibson, the visiting dermatologist, for his interest and help in these cases, and also Dr. Gamble, the medical officer, for permission to report them.

[The reader is referred to a paper on this subject by Professor W. E. Dixon, communicated to the Section of Dermatology of the Royal Society of Medicine on March 17th, and published in the current (June) number of the *Proceedings* of the Society (p. 1197). An annotation of this paper appeared in the *JOURNAL* of March 26th at page 581.]

CARDIAC FAILURE ASSOCIATED WITH NEW GROWTH IN THE CHEST.

BY

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THE following case has interesting features and seems worth recording, as the presence of mitral stenosis, together with a new growth in the chest causing acute symptoms simultaneously, must be exceedingly rare.

The patient, a man aged 41, gave a history of becoming easily fatigued for twelve months, and swelling of the legs and arms for four months. He stated that the oedema in the right arm had always been greater in amount than that in the left.

On admission he was very dyspnoeic and cyanosed. He was coughing up a fair quantity of sputum, which was slightly tinged with blood. There was a considerable amount of oedema—of both legs, the scrotum, and both arms (of which the right was much more swollen than the left). The other signs of cardiac failure present included enlargement of the liver and spleen, a small amount of fluid in the abdomen, and congestion at the bases of both lungs. The urine had a specific gravity of 1020, and contained both albumin and blood.

The physical signs in the chest may be summarized as follows: The heart was enlarged, the right border being half an inch to the right of the sternal margin and the left two inches outside the nipple line. At the mitral valve there was a localized pre-systolic and a soft systolic murmur. The aortic and pulmonary sounds were normal. It was also noticed that the right apex was less resonant to percussion than the left, and that at this side the breath sounds were distinctly weaker. Enlarged superficial veins were present on the right side of the chest.

The conclusions were that the patient was suffering from cardiac failure due to mitral stenosis, and that there was something in the neighbourhood of the right apex which was partially obstructing the innominate vein. An x-ray photograph of the chest was not taken until a later date owing to the gravity of the symptoms.

The cardiac condition was treated by the usual measures; these included rest in bed, venesection, Southey's tubes and incisions into the right arm, and the administration of Nativelle's digitaline and diuretin. After twelve days' treatment there was a marked improvement in all his symptoms, but the oedema of the right arm persisted.

At this stage an x-ray photograph of his chest was taken, and Dr. F. C. Jagger made the following report: "There is a rather dense shadow under the right sterno-clavicular joint, which has the appearance of a new growth."

FIG. 1.—Showing the tumour at the right apex.

The Wassermann reaction was negative. It seemed probable, therefore, that the tumour was of the nature of a lympho-sarcoma.

A course of x-ray treatment was instituted. Twelve B-pastille doses were given in all, six to the front of the chest and six to the back, in the neighbourhood of the tumour. Under this treatment the tumour soon began to show signs of shrinkage, and the oedema of the right arm gradually disappeared.

The patient is now feeling perfectly fit. His mitral condition appears to be well compensated, and there are no physical signs of a tumour in the chest. Further, the

FIG. 2.—Showing the complete disappearance of the tumour after treatment.

x-ray photograph shows that the tumour has completely disappeared, although a secondary deposit of lympho-sarcoma may occur later on.

I am indebted to Dr. G. A. Tullis for permission to publish this case, and my thanks are due also to Dr. Jagger for kindly reproducing the x-ray photographs.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

ACUTE LOBAR PNEUMONIA: DEATH IN NINE AND A HALF HOURS.

THE following case is worthy of record, in that the whole course of the illness, from the initial rigor until death, lasted only nine and a half hours.

Mrs. T., aged 90, was taken ill and had a severe rigor about 2 p.m. one day during snowy weather. She had been up and about as usual during the morning. She was put to bed and given hot drinks, and some few hours later her relatives found difficulty in waking her. When I saw her at 5.15 p.m. she was very drowsy and only muttered when spoken to. The pupils were equal and reacted to light. There was no sign of paralysis in any limbs. When she coughed she brought up the typical blood-stained, "rusty" sputum of pneumonia. The base of the left lung was dull on percussion and the breathing was definitely tubular in character. Few adventitious sounds were present. The temperature was 105° F. and the pulse was 120.

I saw her again at 9.30 p.m. when she was quite unconscious, and I verified the diagnosis of lobar pneumonia by further examination. There were no signs of any cerebral lesion. The temperature had fallen to 103° F., but the pulse rate had increased to above 130 with some irregularity. The patient died at 11.30 p.m.

She had been a very healthy old woman considering her great age, but during the last few years had had several fairly severe attacks of acute bronchitis from which she recovered well. During the last twelve months she required no medical attention.

It is of interest to note that the onset was not of the insidious type usually associated with the aged; the rapid course of the illness indicated that the resistance to the infection was practically nil.

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INTESTINAL OBSTRUCTION DUE TO TORSION OF THE MESENTERY.

THE following details of a case of intestinal obstruction caused by mesenteric twisting seem to be worthy of record, since such torsion must be a very rare cause of obstruction.

A male Hindu, aged 28, was admitted to the Monghyr Sadr Hospital for acute intestinal obstruction, which had lasted five days; his condition was almost hopeless. The tongue was dry and brown, the breath very foul, the eyes were sunken, the abdomen was distended and tympanitic, and the pulse was feeble.

(Lejars aptly described this condition as stercoraemia.) He had faecal vomiting, and gave a history of absolute constipation for five days, not even flatus having passed. Enemas had been given without result. It was decided to operate at once; a rectal injection of ten ounces of glucose solution was given and was retained.

After a preliminary morphine and atropine injection and lavage of the stomach the abdomen was opened under general anaesthesia. The first glimpse of the coils of the small intestine which came into view was very striking; they were deep purple in colour and were beginning to lose their glistening appearance. Some coils escaped from the wound, a few more were pulled out and covered with hot towels. The peritoneal fluid was foul-smelling. The pelvic colon and caecum were not distended, and, from the pre-gangrenous state of the whole of the small intestine, I suspected some mesenteric abnormality. After enlarging the wound and pulling out some more coils of small intestine the mesentery came into view and was clearly seen to be twisted on itself from right to left. More of the small intestine was eviscerated, and I was able to untwist the mesentery just over one turn. There was still another complete twist, but further progress was checked by a loop of the ileum being firmly held down to the posterior abdominal wall above the level of the caecum. Owing to its depth and the bad light, I could not see what was binding down the ileum, but it felt like a twisted cord, as thick as a thumb. While investigating this area gently the gangrenous gut at the seat of constriction perforated, and foul faecal fluid began to pour out of the gut into the right flank. A piece of gauze was pressed down upon it, and a pair of intestinal clamps was immediately applied; the faecal matter was then removed. Excision of any or of the whole length of the gut was out of the question owing to the bad light, the state of the gut, and the condition of the patient. A stab wound was made through the right flank, another pair of clamps was passed through this and placed alongside the first one, which was then removed. This clamp served also to keep open a passage for drainage. Through a small opening in a loop of jejunum a medium diameter rubber drainage tube was passed and fixed by two purse-string sutures. The loop was fixed to the upper part of the wound, the rest of which was closed quickly. Gentle lavage of the jejunum was tried after the patient had been returned to bed, but with only temporary success, the patient dying later. This procedure could hardly have been expected to succeed, but if the patient's condition had improved after drainage another attempt might have been undertaken next day to resect the ileum.

I have found no mention of this condition in any of the standard books on surgery by British authors; thrombosis and embolism of the mesenteric vessels and tumours at the root of the mesentery are described, but not torsion. So far I have only been able to find a description of a similar case by Pierre Delbet, who describes the condition as "Occlusion intestinale par torsion de la totalité de l'intestin grêle et de son mésentère" in the *Bulletin et Mémoires de la Société de Chirurgie*. 1920.