or threatened phthisis, is very considerably depressed, so much so that they are generally unfitted to go through sufficient physical exertion to correct the depressed condition of the chest, and they are very often harmed by any attempt to use such exertion. Gentle exercises—which in their case will be found beneficial—will be very much exceeded by attempts to forcibly increase the chest capacity.

My plan of treatment which I now wish to bring to your notice consists in drawing the shoulders backwards by soft shoulder straps to a pad placed centrally between the scapulae, and permanently held so. There are many so-called braces largely advertised in the present day for effecting this purpose, and if my plan consisted in nothing more, it would be open to the grave objections which I raise against these patent braces. They pull the shoulders back, and give a false appearance of improvement, but they do nothing to relieve the chest from the weight of the arms themselves. Consequently, you will find upon a close examination that the chest is little, if at all, increased in capacity, while there is so much constraint due to the enforced position of the shoulders, that the spine is almost sure to curve in one or other direction. The braces, moreover, tend to pull the shoulders downwards, and so increase the weight which has to be sustained by the trunk. My plan consists in keeping the central pad to the level of the shoulders, and so producing a somewhat upward support, by carrying a light steel rod down the back to the level of the seat, there to be maintained by a pelvic belt. With this alone we find that there is a tendency in sitting for the spine to project backwards, and in standing for the abdomen to sink forwards, causing a condition of lordosis. To obviate these postures a pad is placed in the centre of the back to prevent the backward projection in sitting, and a belt is placed in front of the abdomen to limit its projection while the patient is standing. My practical experience of the results of this treatment is of the most satisfactory kind. Although I have not dealt with patients simply for the treatment of phthisis, the cases which have come before me clearly indicate the benefits which such patients would derive from the method.

On May 11th, 1886, a young lady, aged 16, was sent to me by Dr. Charles Myers, of Louth. She had been very delicate from the age of 4, after measles and dysentery. The weakness increased during the summer of 1885, exaggerated again during the first months of 1886. She had drooped her head forwards during the last three years, the spine curved backward, the chest was flattened, so that it formed a vertical line with the abdomen. Her appearance was that of a phthisical person; she was ashy pale with a hectic blush, and as several members of her family had died of tubercle it was naturally feared that this patient was similarly affected. She had suffered from almost constant cold and cough during the last two and a-half years. Upon percussion I found some dullness over the apex of her left lung. There was pain in the region of the eighth, ninth, and tenth dorsal vertebrae, and the seventh projected slightly. I treated this patient in the manner described above, allowing her to get about as much as she liked. By gradual adjustment at intervals I brought her into an upright position, care being taken never to cause discomfort to the patient. Great relief to all the symptoms was experienced almost from the commencement of treatment. In a week the dullness at the left apex was gone, showing that the air now entered the lung fully. The improvement in the whole health was very rapid; the cough ceased, pain in the back went away, the appetite improved, and on July 27th—less than six weeks from the commencement of treatment—I was able to note, "No pain, looks better, stouter, and brighter," in fact, the change in her appearance and health was very remarkable. She has continued to improve, has become stout and robust, with good colour. I have seen her within the last few months.

Another case was that of Miss M. F., aged 9, sent to me by Mr. T. E. Parsons, of Wimbledon, September, 1885. She had been subject to a spasmodic cough for several years, and could not sit up straight. She had been seen by many eminent physicians, but the exact cause of the cough was obscure. The chest, however, was much contracted, and phthisis was feared. From the day on which the apparatus was applied, this child began to get better, and in a few weeks the cough left her. I saw this patient about two months ago (June, 1893); she had grown to be a fine girl, perfectly robust; her health is perfect, and she is an excellent figure.

I could add dozens of similar cases, but I have selected these two because they are some of the earlier cases of which I have full records, and because I have recently seen these patients, and can report on their present condition.

In advocating this new plan of treatment, or perhaps I ought to say item in the treatment of phthisis, I wish it to be most thoroughly understood that I am not advocating it in the place of other measures. We all know the value of a combination of every remedy to counteract the ravages of tuberculous disease, and to do the best for any patient undoubtedly involves a large amount of trouble and attention. A high and dry situation, a comparatively mild atmosphere,

pure air, carefully selected foods, probably also massage, and various medicinal remedies, are all necessary, but I would add that until we have mechanically increased the vital capacity of the lungs, and have taken measures to keep the patients in an upright position, with their arms supported without great muscular effort on their part, we have not given those patients the best chance of improving their health or of recovering from one of the most prevalent diseases with which this country is afflicted. The question may still occur to some of my hearers—Why not develop the chest by exercises? I have already answered that question, but I may reiterate that a great many of the patients are far too feeble to be able to carry out prolonged or systematic exercises. If they are strong enough, by all means let them be drilled and taught to take prolonged inspirations, but the effects thus produced will be infinitesimal in comparison with the result of mechanical development. The effect of the latter is immediate, is continuous, and is without the effort of the patient. The former process is slow, is interrupted, and is only produced at considerable and generally harmful expenditure of muscular exertion.

The apparatus which is necessary to carry out this treatment is comparatively light, is felt as a great support and help by the patient; it does not interfere in the slightest with development, it allows perfect freedom of use to the muscles, and upon the whole is fully appreciated by the patient on account of the personal comfort derived from using it, and the immediate and rapid benefits to the general health.

CASES OF TUBERCULOUS DISEASE OF THE UTERINE APPENDAGES AND PERITONEUM.¹

By ALBAN DORAN, F.R.C.S.,

Surgeon to the Samaritan Free Hospital, London.

PRIMARY tuberculous disease of the peritoneum is a disorder more or less hypothetical, in the eyes of the pathologist. This implies that the primary disease, of necessity tuberculous, lies somewhere else, a matter of great importance to the physician and surgeon.

We all know the insidious character of tuberculous peritonitis; diagnosis is often difficult. In this communication I shall assume that the disease is correctly diagnosed, or at least strongly suspected, as arising in the genital tract, and I limit my observations to female patients.

How far the treatment should be expectant and how far operative I cannot precisely determine. That is why I have chosen the subject of tuberculous disease of the female internal organs. I seek other opinions.

Purely expectant treatment is not always satisfactory. Tubercle of the appendages may, in its later stages, involve the worst complications so familiar in *tabes mesenterica*, with the additional torments of fistulous tracks in the groins and vaginal fornices. The presence of tubercle in the ovaries and tubes certainly endangers organs and parts where tubercle may kill or cripple. Again, experience shows that operative measures do good, even though it is not certain how that good is done.

On the other hand, we must be slow in urging operations lest we become operators rather than surgeons. In many parts of the Continent most unjustifiable measures are taken in cases of chronic affections of the appendages, tubercle not excluded. The uterus, tubes, and ovaries are taken out or the uterus alone extirpated through the vagina, the operator proudly boasting that he is thus enabled to empty cavities full of pus. Plainly this is operating, not surgery. I read of a typical case of the kind in a foreign medical paper recently. A surgeon operated on a woman who had a large swelling on each side of her uterus—clearly disease of the appendages, but whether tuberculous, gonorrhoeal, or the result of puerperal mischief remains uncertain. The question seems to have been overlooked as though unimportant. He removed the uterus and the right tube and ovary, but the left appendages were so firmly adherent to the pelvic wall and other parts that they were left behind. A few days after

¹ Read at the East Anglian Branch (British Medical Association) Jubilee Meeting.

the operation urine began to dribble from the vagina. Some months later the patient entered another hospital, with severe incontinence of urine, a large swelling in the right loin, and another in the left iliac fossa. The temperature rose to over 105° F. The bladder was found to be uninjured; the urine issued from a fistula in the right ureter. The right kidney was removed, advanced pyonephrosis being discovered. The patient recovered, and was quite well a year later. Observe that the swelling in the left iliac fossa, which was half the reason, so to speak, for the first operation, was left to itself, and the operator has omitted all description of its present condition.

Experience shows that tuberculous disease is not rare in the ovaries and tubes of young subjects where there is a hereditary tendency to tubercle. The disease may certainly occur in virgins. Professor Bumm, of Würzburg, a distinguished bacteriologist, has shown that the gonococcus damages the tubal epithelium, and thus a barrier of defence is taken away from deeper tissues. The appearance of tuberculous disease of the testis, after gonorrhœal or traumatic orchitis in sickly youths, is explained in the same manner. The theory is at least plausible. It does not explain how tuberculous disease of the tubes occurs in virgins. Catarrh of the entire genital tract is not rare, and it is possible that it may also favour tuberculous disease by damaging superficial structures.

Tubercle of the appendages may be limited for some time to those parts without setting up ascites, whilst in other cases ascites is an early symptom.

The first, or localised, form bears a strong resemblance to ordinary inflammatory disease of the tubes and ovaries. When advanced, it is certainly a case for operative measures. Last winter I had under my care two young women with tuberculous histories, from whom I removed the appendages. The tube and ovary on each side ran into each other, or rather communicated by large cavities full of cheesy pus. The patients, who had both been invalids for several years, were restored to health. The removal of organs in this condition suppresses a focus of general peritoneal infection. Of course, I do not set up such cases as an excuse for removing recently inflamed appendages in sickly girls. A close scrutiny into the family history, and rest in bed for a sufficiently long period to allow any case of ordinary inflammation to improve, are first required.

Tubercle of the appendages with ascites is a most interesting disease, and probably not rare. It is hard to distinguish from the passive hydropertoneum also observed in sickly women, possibly set up by catarrh of the tubes, the discharge escaping from the ostia. The encysted dropsy, due to tubercle, is especially puzzling. As a rule, I find that tuberculous peritonitis involves this variety of ascites, as coils of intestine become adherent and limit the effusion. A cyst develops above the hypogastrium. The uterus is free yet the cyst presses down upon it; hence, very naturally, the disease may be diagnosed as an ovarian cyst. A tuberculous subject may suffer from the common cystoma of the ovary like any other woman. In short, there is no absolute clinical distinction between an ovarian cyst and an encysted dropsy in a tuberculous subject. Rules for distinction may be laid down, but in practice the finger, hand, and sound may fail to decide the truth.

As a result, the abdomen has often been opened in cases of encysted dropsy, ovarian cyst having been diagnosed. In most of these cases, the abdominal wound being closed, the patients have recovered more or less completely. Dr. Parker Syme, of New York, has collected a large number of cases where exploratory operations of this kind have resulted in cure, even when pulmonary phthisis was present. These results were observed, it must be said, in cases of tuberculous peritonitis due to other causes than tubal and ovarian disease. Poppert recently operated for intestinal obstruction in a girl and found widespread peritonitis with abundant tuberculous deposit: all this disappeared, and the patient recovered perfectly. He collected five similar cases where tuberculous peritonitis was not discovered until the abdomen was opened for intestinal obstruction.

Two remarkable cases have occurred in my own experience. The first is related in full in the *Transactions of the Obstetrical Society of London*. A girl, aged 16, had a fluctuating swelling in the hypogastrium. Her habits had been irregular. She

had a brother who died of tuberculosis. The uterus lay high in the pelvis; it was movable, but every movement of the fluctuating swelling was communicated to the sound. I made an exploratory incision and found a thick spongy, yellow substance under the peritoneum. I suspected that the substance might be sarcomatous, as ovarian sarcoma is frequent in young girls, and is usually associated with amenorrhœa, as in her case. I closed the wound and did not expect her to survive, but to my surprise I found her in excellent health a few months later. The fluctuation had disappeared and the abdomen was flat. Afterwards the girl became subject to pulmonary phthisis. She died a little more than three years after the exploratory incision. The Fallopian tubes were swollen, forming oval fluctuating cysts; both ovaries were much enlarged and converted into cysts filled with dirty yellow pulaceous material. In all probability the disease began as tuberculous salpingitis, which set up tuberculous peritonitis. The abdominal incision relieved the peritonitis; the thick yellow deposit under the peritoneum no longer existed when the *post-mortem* examination was made, and the encysted collection of fluid had entirely disappeared. This case demonstrates, in part at least, the disappearance of tuberculous deposit after incision.

In another particularly bad case the patient was a tall and apparently strong girl, aged 21; but one sister died of phthisis and one brother had hæmoptysis, dying ultimately of tuberculous disease of the intestines. The patient herself had perityphlitis when an infant, a pin escaping out of an abscess which discharged through the right groin. In 1889 she overworked herself preparing for a Civil Service examination, and her health failed permanently. Early in the summer of 1891 a fluctuating tumour developed in the hypogastrium, reaching to the umbilicus; it was continuous with a pelvic swelling which pushed the uterus to the left. The left knee became painful. The abdominal swelling fluctuated in size. Under the care of Mr. Hatfield, of Forest Hill, her general health improved.

On October 15th, 1891, I opened the abdominal cavity. I discovered extensive tuberculous disease of the peritoneum and intestines, which were matted together. The pelvic viscera were deeply involved. On puncturing a membrane, which really consisted of tuberculous deposit, much cheesy matter escaped. I reached the bottom of Douglas's pouch, and passed a drainage tube into it, much to my present regret, but there was considerable oozing of blood. The tube was removed in twenty-two hours. Unfortunately, the track of the tube opened up a week after the operation, and much cheesy pus escaped. It was fetid, and I feared that a faecal fistula had formed. Fortunately this was not the case, and solid fæces and flatus passed freely from the rectum soon afterwards without any change in the discharge. I had, nevertheless, great trouble with the fistula, but directly I employed an emulsion of iodoform in glycerine as a daily injection, the discharge diminished and the patient's general health improved. The knee, however, remained painful and slightly swollen, and I encased it in a poroplastic splint. The wound at length closed, and the patient went into the country. From time to time there is slight discharge from the wound, but there has been no sign of ascites or advance of the abdominal disease, though the knee is the seat of chronic synovitis.

This was a particularly bad case, and very instructive. My great regret is that I passed a drainage tube into the wound. A tuberculous peritoneum does not tolerate the irritation of that appliance, which is so well borne and so necessary after the removal of strongly adherent tumours. I know of two cases, one under the care of an English and another under a French surgeon, where faecal fistula developed shortly after the tube was removed. In the first case the patient died of exhaustion; in the second she recovered, and the peritoneal tuberculous disease disappeared. In another case of peritonitis where I assisted, I feel no doubt that the disease was tuberculous; the wound was drained, and six or seven months later the drainage track opened, and fæces discharged; the patient soon died. In the French case, which recovered, the intestine gave way at a point where a small mass of tubercle lay on its serous coat. This probably explains the other cases; the tube irritating a point already diseased. Observe that in

the two cases above noted where I removed tuberculous uterine appendages, the disease being localised to those structures. I had no further trouble whatever. Again, in the young girl who died of phthisis, where I simply cut into a dense layer of tuberculous deposit and did not drain, the abdominal disease disappeared, and the patient remained in fair health for two years, dying, three years after the operation, of pulmonary phthisis.

The right treatment, when it is evident that the disease is tuberculous and involves the peritoneum beyond the investment of the uterus and tubes, is to close the wound at once. If cheesy fluid be present it must be allowed to escape, and iodoform emulsion² should be poured in, for the tuberculous discharge, when air is admitted, is very apt to get septic, and the emulsion has a distinctly beneficial effect. Patients with the disease in question are little liable to iodoform poisoning. Mr. Barker, of University College Hospital, finds the emulsion excellent in foetid perityphlitis. Trendelenburg has used it with great success in strumous disease of joints.

Experience, as König and Parker Sims have shown, has established the fact that tuberculous peritonitis is often cured by simple incision through the parietes. This kind of treatment must be held as empirical, none of the theories devised for its explanation are satisfactory. Lauenstein suggested that the cure is due to the mere withdrawal of the fluid, since the tubercle bacillus does not flourish except in the presence of much moisture. Yet in many of the more successful cases no attempt was made to empty out the effused fluid completely—a very difficult task when actually undertaken. In one of my own cases related to-day I did not even reach the fluid; nevertheless it disappeared, as well as the solid deposit into which I passed my knife.

I have laid down what I believe should be done and what avoided, and in conclusion I must note that the earlier the peritoneum is opened the better the chance of relief, and the less the risk of extension of tuberculous changes to the lungs and the joints. In general practice early diagnosis is relatively easy when the family history is at hand. No doubt cod-liver oil may arrest the disease, but if it does not yield to remedies incision of the peritoneum becomes desirable.

MEMORANDA:

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

FRACTURE OF BOTH BONES OF THE FOREARM BY INDIRECT VIOLENCE.

F. B., a lad aged 15, was running backwards on the sands, when he tripped and fell on his back, hurting the left elbow. Immediately an acute pain was felt in the lower third of the forearm, and a swelling was discovered, which made any movement of the left hand impossible. He was brought to me and I discovered an oblique fracture of both radius and ulna, about 3 inches from the wrist. The lower fragments were overriding the upper. Reduction was effected, and the limb put up in the usual way. Malgaigne mentions a case where fracture of both bones occurred from muscular contraction in a man who was digging. Could this accident have had a similar causation? It is certainly exceptional for fracture of both bones of the forearm to occur by impact of the elbow against soft sand.

A. C. DUTT, M.B. Cantab.,

Whitby.

Late Senior House-Surgeon to the Scarborough Hospital.

A SUBSTITUTE FOR CHRYSOPHANIC OINTMENT.

A DIFFICULTY met with in the treatment of extensive psoriasis by ointments is the extreme discomfort and disgust to the patient from the large (superfluous) amount of oint-

² Iodoform (fine crystals) 10 parts; rectified spirit quant. suff. to make damp; distilled water 20 parts; glycerine 70 parts. Rub the iodoform and spirit together in a sterilised mortar, add the water, using the pestle well, and then by degrees pour in the glycerine. If mixed badly, it will clot.

ment that soaks into the clothes. This is a practical hindrance, since many subjects refuse or shirk thorough treatment. It is especially the case in using ointments containing chrysarobin, because of its dirty character. I have met the difficulty with considerable success in the following way, which ensures a thorough application of the drug with the minimum amount of oil needful to secure suppleness of the skin. Solution of chrysarobin in chloroform (1 in 7) is poured into a suitable vessel; a desirable amount of oleum deelinæ is added to it, the whole stirred up with a hog's bristle shaving brush, with which the psoriatic area is to be well scrubbed. The amount of ol. deelinæ will vary with the requirements of the case, but I have used it with the chloroform solution in equal amounts and in greater dilution. I think it worthy the attention of men engaged in dermatology.

W. DALE JAMES, M.R.C.S.,

Medical Officer for Skin Diseases, Children's Hospital, Sheffield.

SPLEEN FEEDING IN LYMPHADENOMA.

In view of the important therapeutic results obtained by thyroid feeding in myxœdema, and the remarkable researches of Brown-Séquard, it would seem to be of importance to put on record any observations made in this promising field of advance.

I have lately had under my care a case of lymphadenoma, in which a palliative advantage was gained by giving as food a spleen, grilled lightly, every day, over which fresh marrow was melted in lieu of butter. The feeding was not commenced till the last month of life in an advanced case, but the general feelings of the patient, a boy, aged 12, were much improved, his chief difficulty only being to find a comfortable position owing to the size of the spleen, and the lateral displacement of the head from the mass of glands in the neck. The spleens were generally those of sheep, and were procured as fresh as possible. I would not like to suggest that life was in any way prolonged, but I think that the general condition was ameliorated, and death made easier.

Sevenoaks.

JAMES E. BLONFIELD, M.B. Oxon.

SEQUEL TO A CASE OF INTRALARYNGEAL REMOVAL OF A CYSTIC TUMOUR OF THE LARYNX IN A WOMAN 80 YEARS OF AGE.

IN the BRITISH MEDICAL JOURNAL of December 3rd, 1892, I recorded this case. The patient was a woman, 80 years of age, in whom the breathing had become greatly embarrassed owing to the presence of a fibrocystic tumour of the larynx. On August 13th, 1892, this was completely removed by the intralaryngeal method. Included in the record of the case was a report by Dr. Robert Stirling, dated October 17th, 1892, as follows: "Voice excellent and breathing perfectly free. The larynx looks remarkably well; no trace of the tumour to be seen; congestion gone, and muscular movements perfect."

On August 24th, 1893—over a year after the operation—a second report was received from Dr. Stirling, to the effect that the patient was perfectly well, with an apparently quite normal larynx. It may therefore, I think, be concluded that the patient has been permanently freed from her trouble.

This case, which in some respects is a unique one, is illustrative of the value of intralaryngeal surgery in averting tracheotomy and in effecting the permanent removal of certain varieties of laryngeal tumours.

G. HUNTER MACKENZIE, M.D.,

Surgeon for Diseases of the Throat and Nose to the Eye, Ear, and Throat Infirmary of Edinburgh.

DISLOCATION FORWARDS OF SCAPHOID AND TRAPEZIUM.

THE following case was admitted into the South Devon and East Cornwall Hospital, Plymouth, on September 16th, 1892, under Mr. Swain, with a curious and rare dislocation of two carpal bones.

G. C., aged 38, a labourer, fell some 30 feet from a viaduct; when admitted he was very collapsed, having fractured his right femur and severely damaged both wrists. On the flexor surface of the right wrist there was a hard lump felt at the lower extremity of the radius, on the extensor surface there