densely adherent that I thought it wiser to desist. Either it will perish, as the result of the cholecystectomy, or, should it survive, it will require operation at a later date, when the patient is in a fit condition to stand further interference.

In one case the hydatid was so deep in the liver that it was deemed better to leave it alone, in the hope that the cyst might degenerate, or that it might reach a more accessible situation in the future.

The general technique at this hospital has become standardized by thirty years of experience, and does not differ materially with the surgeon. Access was obtained in 56 cases by the anterior route; in 19 by excision of a rib. Thus there were more operations than patients; in several cases there were multiple cysts, and in a few the cyst extended entirely through the liver, and a tube was passed from back to front of the patient.

The customary method is to expose the liver; usually the cyst is obvious on the surface. Should it not be seen the liver is palpated, and an aspirating needle is thrust into any dense mass observed. When fluid is withdrawn some surgeons inject a little pure formalin, with the idea of killing any live scolices; some merely leave the needle *in situ*, and quickly plunge a knife deep into the cyst. The finger rapidly follows the knife, and hooks the surface of the liver outside the abdomen, allowing the fluid to escape into a bucket. It usually rushes out with great force, so care is always taken that onlookers and assistants stand well clear of the torrent. The opening in the liver is then enlarged and the mother-cyst drawn out with ovum forceps. The inner surface of the adventitious cyst is next swabbed out with weak formalin or iodine solution, and the edges of the wound in the liver stitched with a continuous suture to the abdominal wall; a large tube is now inserted into the cavity, and the patient sent back to bed. In most cases recovery is rapid and complete.

Should it be necessary to resect a rib, access is obtained through the pleura and diaphragm; no collapse of the lung is ever observed. It is customary to stitch the edges of the orifice in the cyst and the diaphragm together to the abdomino-thoracic wall. Recovery is equally satisfactory.

There is no case in our records, so far as I have seen, where autoinfection during the operation has occurred.

The after-treatment simply consists of removing the tube in a few days, keeping the skin wound open with gauze or a small tube till complete healing takes place. Some surgeons wash out the cyst daily with weak iodine solution.

Should there be more than one cyst present, it may be necessary to make a second or even a third incision, but frequently it is possible to drain the second through the first by penetrating the thin wall of intervening liver tissue.

The operation, as can readily be imagined, is accompanied by little shock or haemorrhage, and the results on the whole are extremely good.

I would venture to remark, as a final criticism on Mr. Buckley's operation, that one of the cysts ruptured while it was being removed. The serious results of such an accident may easily be imagined, should scolices lodge in the large raw surface of the liver wound.

REFERENCE.

¹ BRITISH MEDICAL JOURNAL, September 20th, 1913, p. 725.

THE South Devon and East Cornwall Hospital and the Royal Albert Hospital, Devonport, each receives a bequest of £500 under the will of the late Mr. Robert Bayly of Annery, near Bideford, Devonshire.

THE following officers of the recently formed Association of Assistant Medical Officers of Asylums in England and Wales have been elected: *Chairman*, E. L. Dunn, Berkshire Asylum, Wallingford; *Honorary Treasurer*, W. Maule Smith, 2, Victoria Road, Bromsgrove; *Honorary Secretary*, F. J. Stuart, Berry Wood, Northampton.

IT is announced that owing to the diminution in his emoluments due to the smaller number of births, marriages, and deaths to be registered, the registrar of Matlock has resigned, believing that he will make a better living at his old trade of carpentering. He states that the fees have fallen from over £300 a year to less than £40.

TWO CASES OF TUBERCULOUS PERITONITIS AND SALPINGITIS WITH MENSTRUAL COMPLICATIONS.

By WALTER G. SPENCER, M.S.,
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MR. ALBAN DORAN has kindly given me advice on the following cases and furnished me with references:

1. Intermittent Haematosalpinx attending Menstruation following Tuberculous Peritonitis and Salpingitis.

A girl, at the age of 5, began to suffer from attacks of abdominal pain, accompanied by vomiting and diarrhoea. The attacks were attributed to tuberculous peritonitis; her health was frail, but with unremitting care some improvement gradually ensued. Menstruation, which began at 13, was at first approximately normal, except for some clot. Later on it was accompanied by much general disturbance and also by severe abdominal pain, which was at its worst before the onset of the flow; with the pain there was a general swelling of the lower abdomen. Later, along with the general swelling, a special swelling came to be noted in the iliac region of each side; it was more marked on the left side, where the pain was usually more severe. The pain and swelling of the abdomen subsided as the menstrual flow set in. This flow came to resemble thick ink, except that towards the end it sometimes got thinner and redder.

I saw the patient first in July, 1910, at the age of 15. The menstrual period previous to my examination had been much the worst. She was a thin, slight girl, with normal breasts and pubic hair. The abdomen below the umbilicus was tumid; behind the left rectus there was a tense swelling 2 in. in diameter. During the following fortnight this swelling increased in size, and became more painful until a flow of thick, inky fluid began to escape. On the day before the operation there were ink-like stains on the diaper, and the nurse syringed blackish stuff from the vagina.

Operation.

An incision was made through the left rectus muscle, which exposed dense adhesions between coils of small intestines and the fundus of the uterus, and when these had been separated the tubes and ovaries were found matted together behind it; the appendix vermiformis was not involved.

Right Side.—The right ovary presented a cyst the size of a pullet's egg, which ruptured; the right tube was thickened, dilated, and twisted S-shape. There was a sharp kink in it about an inch from the uterus, but between the kink and the uterus the tube seemed normal. The portion removed was the cystic part of the ovary and the outer part of the tube, leaving 1 in. connected with the uterus, together with the remainder of the ovary.

Left Side.—The left ovary was covered by adhesions, but was separable from the left tube. This was more thickened and dilated than the right; it also had a sharp kink about 1 in. from the uterus. There remained on the left side after the removal the ovary covered by adhesions and 1 in. of the tube next to the uterus.

After-History.

The patient recovered slowly; a sinus formed at the lower angle of the wound which did not heal for a year; from it some blood-stained fluid escaped during menstruation. A year after the operation the patient was seen with the sinus definitely closed, and a marked improvement in her general health had taken place. She was still somewhat anaemic and had had nose-bleeding from the usual point on the septum, but menstruation was regular and normal; she emphasized the great benefit experienced from the absence of all abdominal pain during menstruation.

I have seen her recently—three years after the operation. She is now 18, has grown, is in good health, and has a fresh colour. Menstruation occurs regularly, and the flow is bright red without clots. The periods usually begin with slight pain in the right leg, but there is no abdominal pain, and she is not hindered in any way during her periods.

I took the portions of tubes removed to the College of Surgeons, where they are now in the museum (series Injuries and Diseases of the Female Organs of Generation, No. 201). Mr. Shattock at first thought the specimens an instance of primary carcinoma associated with tuberculosis, but, after further examination and consideration, concluded that the tubes showed a peculiar diffuse tuberculous infiltration.

2. Tuberculous Peritonitis and Salpingitis: Caseation: Menstrual Fistula.

This patient, seen in 1901 at the age of 18, had during girlhood been in weak health and subject to attacks of abdominal pain; lately she had become thinner, paler, and of an earthy aspect. Three weeks before I saw her, after a bicycle ride, a more severe attack of abdominal pain set in, with a temperature of 101° and a pulse of 100. This was followed by the formation of a resistant swelling behind the right rectus abdominis muscle. The patient at the time was so weak that I limited myself to an incision through the rectus, which exposed a cold abscess containing thin, curdy pus. She improved slowly, and ten weeks later menstruation occurred, with a discharge of blood-stained fluid through the opening. As a sinus persisted

with the discharge of menstrual fluid I again operated, and exposed a cavity lined by pulpy granulations. After separating numerous dense intestinal adhesions I was able to remove the right ovary, tube, and appendix, which had been matted together. The tube and, to a less extent, the ovary proved to have been infiltrated by tubercle, which had caseated. The appendix, although involved in the adhesions, had remained unaffected by the tubercle. The left tube and ovary were buried under adhesions. After this operation a sinus persisted for some months, and discharged blood-stained fluid at the monthly periods; finally it healed. I have seen this patient several times in the interval, as well as quite recently—twelve years after the operation. She has remained in good health, free from abdominal pain, and menstruating regularly.

I have not been able to find a case similar to the first on record. The tubes play some part in menstruation, and changes similar to those occurring in the mucous lining of the uterus have been described. Haematosalpinx, apart from atresia of the cervix uteri or of the vagina, and ectopic gestation, is rare, and is generally ascribed to some infection,¹ but Bazy² did not include a mention of tuberculosis. Macnaughton Jones³ described a case of haematosalpinx from primary tuberculosis limited to the mucous membrane of one tube. In both my cases the invasion of tubercle seems to have been from the peritoneal aspect. An intermittent discharge of bloody fluid from a dilated tube occurred in a case described by Knaggs,⁴ but this happened in a woman about the climacteric who had been exposed possibly to both gonorrhoeal and puerperal infection. Doléris⁵ noted the intermittent escape of large quantities of a thin fluid from a tube affected by papilliferous degeneration of the mucous membrane.

REFERENCES.

- ¹ Thomson, *Cent. f. Gyn.*, 1898, xxii, 1227; Thorn, *Zent. f. Gyn.*, 1904, xxiii, 971. ² Bazy, *Revue de gynécologie et de chirurgie abdominale*, 1910, T. xv, 1. ³ Macnaughton Jones, *Brit. Gyn. Journ.*, 1899-1900, xv, 438. ⁴ Knaggs, R. L., *Trans. of Obstet. Soc. of Lond.*, 1894, xxv, 213. ⁵ Doléris, *Bull. et mèm. de la Soc. Obstet. et Gyn. de Paris*, 1890-1891 p. 12.

THE ADMINISTRATION OF GUAIACOL IN PULMONARY TUBERCULOSIS.

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I BELIEVE that guaiacol is not used nearly so much in pulmonary tuberculosis as it might be. It has, no doubt, been used by a considerable number of practitioners, but abandoned as of little use. (1) It was not given in large enough doses; (2) it was not continued for a sufficiently long period; (3) it may not have been possible for the drug to be administered regularly. Even intervals of a few days in the administration have a prejudicial effect.

For eighteen months I gave systematically guaiacol in a fairly large number of cases, mostly of the bronchial type, and though I got no satisfactory results with 5-minim doses three times a day for a couple of months, I found that by gradually increasing the dose up to 12 minims three times a day, and prolonging the period to four months or over, highly satisfactory results were obtained. Many cases of pulmonary tuberculosis no doubt recover when removed from unsuitable to suitable surroundings; and those who claim to have cured cases by tuberculin under such conditions are always open to this criticism, which applies also to guaiacol, but in most of the cases in which good results were obtained the patients had been in the institution for some time, and showed no signs of deriving any benefit from their stay; on being put on guaiacol improvement gradually set in, and became more apparent as time went on. It has been said that guaiacol upsets the digestion; I always gave it before food, and in no case did it cause harm in any way.

The following short details of five cases on which I have taken special notes leaves no doubt in my mind as to the efficacy of the drug:

1. S. C., aged 22. On admission both lungs were affected, and the amount of purulent sputum in the twenty-four hours was 6 oz. The sputum was so fetid that other patients objected to sleeping in the same cubicle, and he had to be removed to a single cubicle. After 175 days he gained 9 lb., the disease was arrested, and the sputum had entirely disappeared. The patient returned to work, and when last heard of was doing well.

2. W. F. H., aged 26. On admission both lungs were extensively affected, and the disease was spreading rapidly. The amount of sputum in twenty-four hours was 2½ oz. After 204

days' treatment he gained 27½ lb., the disease was arrested and the sputum had entirely disappeared.

3. A. R. H., aged 18. On admission both lungs were affected. He was very weak and had had severe hæmoptysis, which had not ceased on his admission. He had a second hæmoptysis seven weeks later. The amount of sputum in the twenty-four hours was 4½ oz. On discharge he had gained 22½ lb., the disease was arrested, and the sputum had entirely disappeared.

4. H. J. W., aged 37. On admission both lungs were affected. He had a severe hacking cough which kept him awake all night and was not relieved by the ordinary sedative mixtures. The sputum in the twenty-four hours measured 5 oz. On discharge, after 175 days' treatment, he had gained 15 lb. in weight, the disease was arrested, cough was very slight, and the sputum had almost entirely disappeared.

5. J. J. B., aged 42, was readmitted after two and a half years with both lungs affected, and in the right was a large cavity. The sputum in the twenty-four hours measured 3 oz. On discharge, after 193 days in the sanatorium, he had gained 13½ lb. in weight, the disease was arrested and the sputum had practically disappeared.

I administer the drug in the following mixture, and as a rule find it practicable to increase the dose of guaiacol by 2 minims each week until a maximum of 12 to 15 minims is given three times a day: Guaiacol 5j, spirit. vini rect. 5j, syrupi limonis 5j, spirit. chloroformi 3ij, aqua ad 3vj. The dose of this is 3ss thrice a day.

I have records of a considerable number of further cases in which marked improvement has ensued on the administration of guaiacol according to the above formula, and feel confident that other practitioners, if they take up this treatment on the lines indicated, will have similar success.

EPIDEMIC CERVICAL ADENITIS.

BY

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THE cases so clearly described by Dr. J. Gordon Sharp in the JOURNAL of November 15th, 1913, in which the patients are suddenly seized with fever and soon show great enlargement of the lymphatic glands of the neck, without sufficient cause in the throat or elsewhere to account for the condition, seem to belong to the group first described by Dr. E. Pfeiffer in 1889 under the name of glandular fever—*Drüsenfieber*. A very complete and succinct description of the disease occurs in Allbutt and Rolleston's *System of Medicine* from the pen of Dr. Dawson Williams. Dr. Sharp refers to an article in the JOURNAL of June 14th last, where a correspondent describes an epidemic of the fever which had occurred in an institution, and which he considered "to be a new disease." His cases, too, all fit in with the classical accounts of glandular fever, except that he says that the heart was frequently involved—the title of his communication, indeed, was "An Epidemic characterized by Adenitis, Tonsillitis, and Cardiac Complications." This involvement of the heart does not appear to have been previously noted, and it is just possible that the systolic murmurs—and they were all systolic—that so often occurred were merely "functional" in origin and would disappear when the patients fully convalesced.

Until last spring I do not remember having come across any cases of glandular fever, but then my attention was painfully drawn to the condition by two cases which appeared in my own family. They were, shortly, as follows:

CASE I.

Girl, aged 14 years, previously in perfect health, except for the occurrence of measles several weeks before, came home from school one day feeling out of sorts, and with a temperature of 104° F. Very soon the glands in the left side of the neck became enlarged and very painful, and a few days later the swelling and tenderness shifted to the right side. The throat was slightly congested, but showed nothing to account sufficiently for the adenitis. She remained quite ill for some days, and had several attacks of epistaxis and vomiting, with a good deal of abdominal pain, and then the temperature fell by lysis, and she gradually made a perfect recovery. We learnt that a number of other girls (about eleven) at the school were taken ill at the same time in the same way.

CASE II.

Boy, aged 11 years. Exactly a week after his sister had come home ill he was seized in the same way with high fever and, soon, pain in the neck, with greatly enlarged lymphatic glands. The throat was scarcely at all reddened. He had no epistaxis, but persistent vomiting and a good deal of abdominal pain. The swelling at first was on the right side of the neck, but soon the