illness, she discovered that she had an abdominal tumour, and consulted me. I noted "small uterine fibroid, no troublesome symptoms, no bleeding." The period was regular, appearing every twenty-eight days. In the course of the year, after I examined the tumour, the show became more frequent, and small clots passed. In January, 1899, I found that the tumour was much enlarged, a lobule bulged into Douglas's pouch, and another into the right fornix. The upper limits of the tumour lay 3 in. above the umbilicus, the lower part occupied Douglas's pouch; the posterior lip of the cervix was involved in the growth, the anterior being drawn upwards nearly to the level of the pubic arch. I operated on February 21st, 1899. I enucleated part of the tumour out of the left broad ligament and sigmoid mesocolon and another lobe out of the right broad ligament. The bladder was drawn up on the anterior surface of the main tumour, but there were no adhesions. Both ovaries were removed. Nevertheless, the period persisted, though it became irregular for two years; at the same time the patient was troubled with flushings. Abel⁴ would attribute the continuance of the period to the presence of some endometrium, the uterus being amputated about half an inch above the os internum. After the cessation of the period there were no more flushings, and when I saw the patient last July—six years after the operation—she was in perfect health.

CASE III.

J. H., age when the operation was performed 43. The abdomen began to enlarge a year or more before I operated on Case I. In August, 1898, she came over from Holland and consulted me, declaring that the swelling had been stationary for some time. I detected a typical fibroid deeply lobulated, reaching about 3 in. above the umbilicus, but it did not extend downwards below the level of the pelvic brim. I advised her to see me from time to time, and for five years I found from my notes that it tended rather to diminish in bulk than to increase, and it certainly became harder. But in 1904 it began to grow again, and a lobe extended down into Douglas's pouch. I advised operation, which the patient postponed for a year, by which time the abdominal enlargement had become very unsightly. The catamenia, quite unaffected by the tumour, were regular, appearing every twenty-six days, and the show was always moderate.

In June, 1905, I noted "solid, elastic tumour, consisting of several distinct lobes, one reaching epigastrium, another passing deeply into Douglas's pouch." The cervix was drawn up very high under the pubes. I operated on July 6th, 1905, removing a lobulated tumour weighing 8 lb. 2 oz. There was no difficulty as in the other cases, for the broad ligaments were not opened up; on pulling the mass out of Douglas's pouch, the cervix was rotated backwards, it was rather elongated, and contained two very hard interstitial fibroids of the size of cob-nuts, which I dissected out, but I amputated the uterus above the os internum, removing the left ovary only. The patient made a good recovery.

OBSERVATIONS.

The fibromyoma of the uterus was of the same type in all three cases. The growths were interstitial, subserous and submucous in all, the first type prevailing, least marked in Case I, and most in Case III, where there was a large pedunculated lobe. In all, the cervix was involved and displaced. None of the cases was of the typical "bleeding fibroid" type; the catamenia were quite unaffected by the tumour in Cases I and III, although there was a submucous growth of some size in Case III. There was, it is true, distinct menorrhagia in Case II, but it was quite trifling compared with the growth of the tumour, and caused no anaemia. The fibroids in all cases grew slowly at first and quickly afterwards. Case III remained stationary for some time. Their history shows the importance of closely watching all cases of fibroid when for any reason operation is postponed. All the patients, being single women, desired operation mainly on account of the unsightly abdominal enlargement, and all were in an ideal general condition for a surgical operation when hysterectomy was performed, being free from obesity, alcoholism, and visceral disease.

REFERENCES.

¹ Remarks on Five Successful Hysterectomies for Fibroid Disease in One Family, *BRITISH MEDICAL JOURNAL* vol. i, p. 357. ² In one of these cases an ovarian cyst was removed as well. ³ In all three cases I amputated the uterus about half an inch above the level of the os internum. ⁴ Referate über die Behandlung der Myome, *Zentralbl. f. Gynäk.*, 1899, p. 616.

PAROVARIAN CYST WITH TWISTED PEDICLE.

By COMYNS BERKELEY, M.B., B.C.CANTAB.,

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THIS case is interesting, since so far as I can ascertain, it is unique. I removed the cyst from a married woman, aged 23, who had never conceived. She first menstruated when 15 years old, and this function though regular was accompanied by dysmenorrhoea and latterly menorrhagia. The patient was admitted into the Chelsea Hospital for Women complaining of a dull aching pain in the left lower abdomen, dyspareunia, and painful micturition with difficulty of control.

On examination the uterus was found retroflexed and a round cystic swelling was detected lying on its anterior surface.

On opening the abdominal cavity the appearance first sug-

gested a supernumerary ovary, but a closer examination proved that the Fallopian tube as the result of the cyst's axial rotation had invested the ovary and cut it nearly in half. Its removal was quite simple and the recovery was normal.

I showed the cyst at a meeting of the Obstetrical Society, and the following is the report of its Pathological Committee:

This cyst was removed from the right side of the body. The pedicle, consisting of Fallopian tube, mesosalpinx, and including the ovary and its ligament, has been twisted upon itself by rotation in the antero-posterior direction. In the twist the Fallopian tube has invested the ovary and by pressure atrophy has divided the gland nearly completely into two portions. There is, however, a part of the ovary which has escaped division and which still unites the two segments by a narrow band of ovarian tissue in the neighbourhood of the hilum. The portion of the tube engaged in the strangulation has been completely divided.

The pedicle was untwisted for illustrative purposes so that a plainer representation could be made of the divided ovary.

COLLOID CARCINOMA AT TWELVE YEARS OF AGE.

By JAMES A. MILNE, M.B.,

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THE following case appears to me to be unusual, not only in the occurrence of colloid carcinoma at so early an age, but also in the unusual type of symptoms manifested:

The patient, A. C., aged 12 years, first complained of abdominal pain about 7 a.m. on August 10th. The temperature was 97° F., and soon afterwards the bowels acted and he vomited once. He was given castor-oil.

No particulars about his previous health could be obtained, beyond the fact that he appeared to be in his usual health on the previous day, though never very bright.

By noon he had passed four or five motions, which were, it was said, not offensive nor blood-stained, but simply loose.

When seen at 2.30 p.m. there was less pain and the diarrhoea seemed to have ceased. The tongue had a whitish fur. After this the diarrhoea returned, and the eyes were noticed to become of a darker shade; later he became restless, with slight low delirium.

At 8.30 p.m., when I saw him again, the patient was collapsed, the aspect being that of abdominal disease. The respiration was jerky and somewhat laboured, the pulse small and rapid, and the abdomen was somewhat distended, hard, and tympanitic; the temperature was 100.5° F. Nothing abnormal could be detected in the chest.

The patient was brought to Her Majesty's Hospital (in connexion with Dr. Barnardo's Homes) and warmth, stimulants, and turpentine enemata applied. Later, the patient became somewhat anaemic, the dyspnoea and restlessness becoming more marked. Dr. Richardson, of Commercial Road, saw the patient with me and agreed that he was not fit to stand any operation; ergotin and morphine were administered. Marked tenesmus was present while in the hospital. Gradually the patient sank and died at 11.40 p.m., after one day's illness.

At the necropsy on August 11th, made with the co-operation of Dr. Richardson, nothing abnormal could be seen in heart, lungs (except adhesions of both pleurae), kidneys, spleen, or liver.

On opening the abdomen, the large intestine was found to be much distended (to a diameter of 2½ in. to 3 in.); the small intestine was not so distended. There was a little free sanguineous fluid in the peritoneal cavity, but no sign of peritonitis. The stomach and small intestine contained a yellowish fluid; the mucous membrane of the stomach being somewhat congested. The contents of the large intestine consisted of much gas and a dirty-brown fluid; the mucous membrane was somewhat congested.

In the upper part of the rectum a hard mass was found, which, on removal, was seen to consist of a concentric growth in the rectal wall, extending for 2 in. along the rectum and constricting its cavity. Behind this mass there were several enlarged glands, one of them being as large as a cherry. On opening the gut, the wall was seen to be thickened to ½ in., while the mucous membrane was eroded and ecchymotic; the stricture admitted the tip of the little finger; the growth and enlarged glands were all remarkably hard.

A report from the London Hospital Pathological Institute on the microscopical appearance of the growth states as follows:

"The section at one spot shows mucous membrane with thickened basement membrane and much round-celled infiltration; elsewhere it has been completely destroyed. For the most part the section consists of irregular fibrous septa enclosing spaces; these spaces are subdivided by delicate strands, which stain blue with Gram. Arranged irregularly in the spaces, and more densely along the fibrous septa, are polyhedral cells of an epithelial type whose nuclei stain well with haematoxylin. In one spot there are ducts lined with an epithelium, which is proliferating in irregular fashion, but in places has a columnar arrangement. In a few places colloid material is recognizable, but the method of preparation has destroyed it in most of the spaces. The peritoneal coat is thick and fibrous. The section is that of a colloid carcinoma of the large intestine."

A CASE OF HAEMATOMA OF THE LABIUM MAJUS FORMED DURING LABOUR.

By JOSEPH JONES, M.B., CH.B. VICT.,
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In the EPITOME for September 16th, paragraph 168, an account is given of the spontaneous development of a haematoma during the seventh month of pregnancy. A record of the formation of one during labour may be of interest.

The patient was a primipara of 35 years, and rather unintelligent. At the beginning of the second stage the head was still at the brim of the pelvis and not properly engaged. As it remained there an undue length of time it was drawn into the cavity with the forceps which were then at once removed, and the case left to Nature. The child was born forty minutes later in the first cranial position, and weighed about 6 lb.

About two hours before birth a painful swelling the size of a hazel-nut was observed in the mother's right labium majus, at the junction of its lowest and next fourth. There was no change of colour. It continued to increase in size until, when

the head had begun to distend the soft parts, it had attained the dimensions of a hen's egg. As it appeared probable that its bulk, in a part already on the stretch, would cause a bad tear, an incision ½ in. long was made into it, parallel with the vulva; some liquid venous blood was liberated, and more continued to flow in a thin but continuous stream for a few minutes, amounting to about 2 oz. altogether. The tumour, however, did not disappear until the vertex had become plainly visible through the vulva, when the pressure caused the vaginal wall to rupture over the tumour, which was ejected from the vagina as a clot measuring 2½ in. by 2 in. by ¾ in. Delivery soon followed. There was no further bleeding of importance.

The tear thus started continued for an inch on the skin surface of the perineum, and to the extent of 2½ in. up the posterior wall of the vagina. It was duly sutured.

The subsequent history of the patient was satisfactory, except for a rise of temperature beginning about the end of the second week, and lasting four or five days, which was traced to an attempt to douche the vagina with an enema syringe, using only the bone rectum nozzle. The temperature fell from 102° F. to normal within twenty-four hours of this error being corrected.

The only etiological factors noted, apart from such increased blood pressure as always occurs in parturition, were: (1) The advanced age of the primipara, the effect of which in causing degeneration of the blood vessels was probably negligible; (2) the prolonged lodgement of the head at the brim, which apparently obstructed the venous return by pressure on the common iliac, since it was in this stage that the tumour began to form; and (3) the mental condition of the patient, which, perhaps, may have had some analogy with the state of mind of lunatics in whom haematoma of the ear is relatively very common.

The nature of the influence of insanity in producing blood tumours is unknown, and in the absence of more obvious cause it would appear reasonable to attribute to the patient's general stupidity a possible share in the bringing about of the haematoma in this instance.

RATS IN RELATION TO PLAGUE.

By BRUCE SKINNER,
Lieutenant-Colonel, R.A.M.C.

III.

THOSE who have become sufficiently interested in this question will desire to have available some means of distinguishing the tick which may prove to be the vehicle of plague to men and rats.

Before proceeding, attention must be called to an address¹ on Plague in India, given by Dr. Creighton before the Society of Arts on May 18th last. There are two points in this address which have a bearing on the subject under consideration. Dr. Creighton points out that there are two great seats of plague, "one the plains of the North-West, the other the alluvial valleys of the Deccan and Gujerat." These areas, marked on a map of India on p. 811 of the report of his address, show "fairly enough where the interest really lies." The other point is that Dr. Creighton draws attention to the comparative freedom from plague of stone-built villages, as shown in Ratnagiri; while the mud-built villages of Satara have suffered heavily. It can be readily understood that in the latter there would be every facility for the operations of ticks. The bearing of the point first mentioned above will become obvious on reference to the accompanying chart.

Out of some 250 species of tick noted by Professor Neumann in the *Mémoires de la Société Zoologique de France*, vols. ix, x, xii, the distribution of *Hyalomma aegyptium* forces itself upon the observation as coincident with that of the endemic plague areas, Yunnan excepted. Its occurrence in Bombay points to the West as the source of its arrival in India; from Bombay its spread may be found to coincide with the extension of plague. But there is another focus. Kumáon and Garhwal have long figured in the Indian reports² as plague centres in which an advance of the area of the disease was noted at each fresh outbreak. "This disease, which first commenced in the snowy range, is undoubtedly coming lower and lower every year."² We probably shall find an extension southwards from Lob Nor, across Thibet, of the *Hyalomma aegyptium*. The early history of the latter invasion will never be detected step by step, but it may be safely inferred that it entered Garhwal,