of one of the specimens. In some of the sections, glandular acini and ducts of nearly normal appearance can be seen, the acini being lined with a layer of low cylindrical cells, but in parts, as illustrated, the contour of the acini is broken and lost, and the acini are hyperdistended with cells of irregular shape from mutual pressure which have infiltrated the surrounding stroma. The stroma is unusually dense in most parts of the sections. These changes are commonly accepted as conclusive of scirrhus cancer, and demonstrate the peculiarly insidious manner in which the disease arises from small foci concealed from detection by manipulative examination by superficial coverings of apparently healthy mammary tissue.

I should like to call attention to certain bodies of which I do not know the import in these sections. Scattered throughout the stroma are bodies shaped like bacilli, but much too large for them. They are longer than the diameter of a cancer cell and their width is about a quarter or a fifth of their length.

In such a case as this the value of microscopic examination cannot be overestimated, as affording a certain diagnosis at a much earlier period of the disease than can be arrived at by other methods. Excepting those rare cases in which mammary cancer undergoes spontaneous resolution, it will scarcely be disputed that the prognosis, whether favourable or the reverse, bears a direct ratio to the period in the natural course of the disease in which it is detected and submitted to surgical treatment. If detected in the pre-cancerous stage or when cancer has only first made a definite beginning, as in this example, removal of the affected organ will rarely be followed by recurrence, in proof whereof I could cite several instances; but if the disease be allowed to proceed unchecked till it assumes considerable proportions, how can it be hoped that some outlying portion of cancerous deposit of minute size will not be left behind even after an operation of great magnitude?

PANCREATIC CYST OR EFFUSION INTO LESSER PERITONEAL CAVITY?

By PAUL SWAIN, F.R.C.S.,

Surgeon to the South Devon and East Cornwall Hospital, Plymouth.

As a sequel to the cases of effusion into the lesser peritoneal cavity recorded by Mr. Jordan Lloyd in the BRITISH MEDICAL JOURNAL for November 12th, 1892, the following case is of much interest:

History.—C. N., a man aged 38, came under my care on September 22nd, 1892, with the following history: Three

months previously he had an attack of colic with pain in the right side of the abdomen. The bowels were not opened for three days, and at this time a lump was found by a naval surgeon in the abdomen. He got over this attack and resumed work, but four or five weeks ago, while running a race, he strained himself and was seized soon after with great pain in the abdomen. For this he was admitted to the naval hospital, and after seven weeks invalided out of the service.

Present State.—It was at this time that I first saw him, and found him in the following condition: A fine, healthy-looking man, with a swelling in the abdomen, which gave rise to no pain beyond a feeling of uneasiness after exercise and some fullness after meals. He had lost 2 stones in weight in three months. He had never been out of England, and always enjoyed particularly good health. Temperature 98° F.; pulse 60; respiration 18. The abdomen was distended between the umbilicus and xiphoid cartilage by a round, elastic, fluctuating, and tense smooth swelling, at once felt and easily defined by placing the hands on the abdomen. It appeared to be about the size of an ordinary cocoa-nut, and had well-marked pulsation, which seemed to be expansile, and yet on pressing the hands deeply in on each side and lifting the cyst forward the pulsation became less marked. The percussion note over the swelling was dull, the dull area being almost exactly central, but inclining slightly to the left. The heart was normal in position, and the sounds were clear. The femoral and tibial pulses were good and equal on the two sides. On auscultating the swelling a *bruit* was to be heard over a very limited area in the centre. All the other organs were healthy. Digestion was good, the tongue clean; there was nothing unusual in the appearance of the motions; had occasional sickness lately.

Diagnosis.—The diagnosis seemed to be between (1) pancreatic cyst, (2) aneurysm of some branch of the coeliac axis, (3) cystic disease of mesenteric glands; and considering the absence of all symptoms except occasional colic and sickness, and the sound state of all other organs, the former seemed the most likely, so I decided to open the abdomen, and deal with it as circumstances directed.

Operation.—On October 8th, chloroform and ether having been administered, I opened the peritoneal cavity by a central incision 3 inches long, midway between the umbilicus and ensiform cartilage. The omentum at once bulged into the wound and was turned up, but, as the tumour could not be reached well from below, it was reduced again; the stomach was drawn down and to the left, and the tumour bulged forward above it, being bounded above by the liver, below by the stomach, and passing deeply back. Now on grasping the mass it was evident there was not expansile pulsation, so sponges were packed round it, and a small trocar thrust in. A stream of dirty brown fluid spouted out to a distance of several feet; the trocar was then withdrawn and the opening enlarged, when the cavity was found to extend back to the vertebral column, where its posterior wall was firmly fixed. After removal of all the fluid a considerable quantity of greenish-black masses of pigment was found lining the interior, and as much of this as possible removed by means of the finger nail and flushing. A Keith's glass drainage tube was then introduced, the lower part of the wound closed, and the edges of the opening in the cyst sutured to the upper angle of the abdominal wound. The end of the glass drain was then passed through a slit in a sheet of thin rubber, and the remainder of the wound dressed underneath. A sponge, wrung out of an antiseptic solution, was placed over the mouth of the drain. Owing to the fixity of the cyst wall posteriorly, and its brittleness, some difficulty was found in bringing it forward enough to suture to the skin edges.

After-history.—Recovery was uninterrupted, and the only trouble lay in the tendency of the cavity to close in the middle, leaving a pouch posteriorly in which fluid collected. In twenty-four hours the cyst, which contained 30 ounces, had contracted so that it gripped the tube tightly. The sinus completely healed in less than two months. On September 30th, before operation, his weight was 9 st. 10½ lbs.; November 11th, 10 st. 4 lbs.; December 7th, 11 st. 3 lbs.

Examination of Fluid and Sac Wall.—The fluid measured 30 ounces, was alkaline, of a dirty-brown colour, the solid matter in it consisting of blood cells, a few large (?) colostrum cells, and

a small amount of cholesterine. No bile. Does not emulsify fats well or convert starch into sugar. Microscopic examination of the cyst wall showed no glandular tissue; the portion examined, however, was small and much crushed by forceps.

REMARKS.—At first this was thought to be a pancreatic cyst; but after examination of the fluid and the cyst wall it seems most probable that in June, when the patient had his first attack of colic and constipation, a block occurred in the pancreatic duct, and a retention cyst formed, which subsequently was ruptured into the lesser peritoneal sac at the time of the strain while running, the case then becoming to all intents and purposes identical with those published, and so well described, by Mr. Jordan Lloyd, of hæmorrhage into this sac.

MEMORANDA:

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

TERPENE HYDRATE IN BRONCHIAL CATARRH.

I AM desirous once more of calling attention to the value of terpene hydrate in the treatment of affections of the bronchial and nasal mucous membranes. Its properties have been well known for many years, but in this country it has never been a popular remedy, and its claims seem to have been overlooked in favour of pure terebene and other similar compounds. It is a hydrate of turpentine, and is made by treating oil of turpentine with nitric acid and alcohol. It is a solid, and has somewhat the appearance of chloral hydrate. Its odour, which is slight, resembles that of pure terebene. The great difficulty in the way of its administration is that it is practically insoluble in water. It is usually said to dissolve in alcohol in the proportion of 1 in 10, but many specimens are far less soluble. On the Continent, where it enjoys a high reputation in the treatment of bronchial affections, it is used as a popular remedy in the form of an elixir. For some months past I have prescribed it in a solution containing 5 grains to the half ounce, made up with simple elixir and flavoured either with tincture of Virginian prune and syrup of tar, or with the aqua laurocerasi. For patients who cannot take sugar the elixir may be made with saccharine. Terpene not only relieves cough and lessens bronchial secretion, but is a diuretic, and has been used with advantage in neuralgia.

Welbeck Street, W.

WILLIAM MURRELL, M.D.

OPERATIVE MIDWIFERY UNDER DIFFICULTIES.

I was called in on December 28th, 1892, to relieve M. K., a Burmese woman, aged 23, married five years, a primipara, who had been in labour two and a-half days. On arrival I found an arm (right) presentation, and two old Burmese women, with their feet planted against the patient's buttocks, putting severe traction on the presented arm. The result was jamming of the shoulders and buttocks in the pelvic outlet, with the uterus firmly contracted on the rest of the body, and without a drop of amniotic fluid left. The child had been dead about twelve hours.

I at first tried to return the arm and perform version, but to no use; my only resort was to operate, and remove the child in parts. Being on field service against these Chins, there were naturally no arrangements made for treating the female sex; but out of the "capital case" in the field panniers I selected a pair of small sharp-pointed scissors (no large blunt ones were procurable), a pair of small bone pliers, and a small scalpel. The woman refusing to take chloroform, I tied the cord, which had prolapsed, and began by amputating the arm through the shoulder joint, then, with the bone pliers, opened up the cavity of the chest through the apex of the right shoulder, and by dilating this opening with my fingers I managed to do complete evisceration; next with the bone pliers in my right hand and my left in the cavity of the chest and stomach as a guide, I cut through the seventh cervical vertebra first; then, changing the pliers for the scissors, I worked through the muscles, tissue, and pelvic bone from within the body of the child, till I cut through the

right hip-joint, then catching the right femur, I managed to deliver the right leg, partly turning it inside out like the inverted finger of a glove. After this the body of the child was easily delivered, with the head coming last, followed in half an hour's time by the placenta. I had no means for washing out the uterus, but a good antiseptic douche for the vagina was given by means of Reid's stomach pump. No serious hæmorrhage followed, and there was no laceration of the vagina or perineum whatever, as I preserved the skin of the child as much as possible. The child was a full-term male. The puerperium was very satisfactory, the temperature only rising to 104° F., once on the first day after delivery, when a smart purge and quinine, with belladonna to the breasts, reduced it to 99.6°, above which it has never been since.

The patient is a "pwai" dancer, and the peculiar antics this occupation calls for easily accounts for the displacement of the child, I think.

This case shows what rough and ready treatment Burmese women can stand with apparent impunity, especially considering the insanitary state of their surroundings. This patient was confined in a bamboo hut, 14 feet by 6 feet, built over a marsh, in which three women and her husband lived.

CHAS. A. JOHNSTON,
Surgeon-Captain, I.M.S.

Kaléwar, Upper Burmah.

MAMMARY DIPHThERIA FROM SUCKLING AN INFECTED INFANT.

ON January 23rd, 1893, I was called to see an infant, A. P., aged 6 weeks. The glands at the angle of the jaw were somewhat enlarged, pulse 140 (feeble), temperature 103° F. The tonsils were very red, and a large white patch of membrane nearly covered the left tonsil, and extended to the uvula along the soft palate. The child appeared very ill, and could scarcely take the breast, upon which it had hitherto been fed exclusively.

I ordered $\text{m} \nu$ of tinct. ferri perchl. in a teaspoonful of lemonade every four hours, and painted the patch with equal parts of sulphurous acid and glycerine. I directed that $\text{m} 20$ of brandy should be given in a teaspoonful of lemonade every four hours, so that every two hours the infant had alternately iron and brandy. I warned the mother that she was exposing herself to great risk in continuing to suckle, and advised her to wean the infant at once. This, however, she could not be persuaded to do, feeling convinced that such a course would lead to the death of her child, it being in such a low condition.

On January 24th, 25th, 26th, and 27th the infant remained in much the same state, saving that on the latter two days it was quite unable to take the breast, so that milk was drawn therefrom, and by constant care and attention a sufficient quantity of nourishment was administered to sustain life.

On January 28th the infant seemed better, and from this time forward made an uninterrupted recovery; but on this day the mother, aged 31 years, complained to me of feeling languid and ill, and of having cold shivers. She moreover stated that she had pain in the left breast and armpit, and that each of these regions was exquisitely tender to the touch, but these symptoms she attributed to her breast being over-distended with milk, due to the fact of her infant having taken so little recently. The breast was swollen, hard, tense, and very tender; the nipple projected straight out, was hard, and moreover covered by a tough greyish-white membrane, which extended in one direction as far as the outer edge of the areola towards the left axilla. There were also three other small patches situated around the areola on its outer edge, and one line of membrane running along a fissure radiating from the nipple outwards. The membrane was tough and firm, and upon removal of one of the smaller patches a raw surface was exposed, from which blood slowly exuded. For a distance of about an inch around and external to the areola the breast was very red and hot. The temperature was 103.2° F., pulse 90, respirations 20; the urine contained a good trace of albumen. I prescribed tinct. ferri perchl. $\text{m} x$, quinine sulph., gr. ij; with potass. chlor., gr. v, in solution every four hours; painted the membrane on the breast with a solution of sulphurous acid 2 parts and glycerine 1 part; put the patient on a liberal diet, with an allowance of 12