which pus will subsequently form. Picric acid has more antiseptic and penetrating qualities, and, if the lesion is quite superficial, will completely rid it of offending organisms. At the same time, unlike other antiseptics, it appears to cause no irritation to the tissues. Its only drawback is the deep staining it produces. When used at all it should be applied very thoroughly, the acid being renewed frequently until the coagulated lymph completely covers the sore. I generally place the well-soaked lint on the wound and cover this with non-absorbent wool or gutta-percha tissue. The dressing may be left on from twelve to forty-eight hours according to the asepticity of the original wound.

These few remarks may possibly suggest the use of this remedy in other and similar lesions.

REFERENCES.

¹ BRITISH MEDICAL JOURNAL, 1899, vol. i, p. 678. ² Ibid., 1897, vol. p. 457.

MANSON'S TROCAR AND CANNULA FOR THE TREATMENT OF LIVER ABSCESS.

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THE three following cases illustrate this method of treating hepatic abscess:

CASE I.—At Hong Kong, early in 1893, a marine officer came under my care convalescent from fever. He was taken ill at Singapore on December 17th, 1892, and on the 19th was jaundiced; he was confined to bed for only a few days, and, as a rule, slept well, and had a good appetite; he stated that his temperature, as a rule, was normal in the day, but rose to 102° in the evening, with sweating.

In January, 1903, he had a rigor, and suffered from hepatic and right shoulder pain; the hepatic region was frequently examined, but with negative results.

On February 6th he left Singapore as a reputed convalescent for Hong Kong, and on the 14th of that month came under my care. His conjunctivae were icteroid, and there was marked enlargement of the liver, with slight tenderness; but the appetite was good, the bowels relaxed, and the tongue clean.

On February 18th fine crepitations were noted immediately below the right nipple, with pain on coughing or laughing.

From February 20th to 26th the bowels were relaxed, the stools bilious, with mucus, partially digested food, and a trace of blood. Friction crepitus was noticed, and a liver dullness slowly ascending, increased hepatic tenderness; his spirits were good, also his appetite, and his tongue clean, but there were night sweats; he was emaciated and wan looking, with variable temperatures, some days normal and sometimes slight fever. Though hepatic abscess was suspected, his *bien-être* and, as a rule, excellent spirits, caused the diagnosis to be thought—even by an expert in liver abscess, who saw the patient with me—to be questionable.

On February 27th the stools were healthy; there were no night sweats, definite hepatic pain or tenderness on percussion, manipulation, or exertion, and convalescence was anticipated.

On February 28th and March 1st the temperature was normal; the following days slight fever recurred in the evening, with anorexia in the morning.

On March 5th he was aspirated in the sixth intercostal space, 2 in. below the right nipple, and an abscess was discovered $1\frac{1}{2}$ in. from the surface, immediately below the friction crepitus area. The operation was followed by severe spasm of the right rectus muscle, and slight febrile disturbance for forty hours, when the temperature became normal, and continued so for two days.

On March 10th the abscess was evacuated by means of Manson's trocar and cannula, with indiarubber drainage tube, and a glass tube inspection-insert some distance down it, draining into an antiseptic solution. The patient's pulse was feeble, but the thirty minutes operation under ether followed by chloroform was borne well. From $1\frac{1}{2}$ to 2 pints of pus were evacuated.

For ten days after the operation there was slight fever, but the patient took nourishment well, slept well, and suffered little or no discomfort; the discharge now appeared as pure bile, about $3\frac{1}{2}$ fluid ounces passing in twenty-four hours. The drainage, I consider, might have been discontinued in this case on the sixth day.

On March 19th the tube was cut and secured close to the surface of the body, dressing antiseptically.

On March 25th the patient sat up in the ward.

On March 29th the drainage tube, previously reduced by replacement with one smaller in calibre, was found in the dressing.

On April 5th the operation wound was healed.

After April 28th there was uninterrupted convalescence, with normal temperature.

On May 3rd he proceeded to England via Japan and Canada, spending some days en route at the Chicago Exhibition. Shortly after his arrival in England he was appointed a gymnasium instructor for the army. In 1897 he proceeded to join the Egyptian forces advancing to Khartoum, was wrecked on passage up the Nile, and suffered considerable exposure, but enjoyed excellent health during those military operations, and subsequently. He has now returned to England in perfect health and has again been appointed gymnasium instructor.

CASE II.—Shortly after treating this patient, a storehouse-man in the Naval Dockyard, Hong Kong, was similarly treated by me; the abscess tapped and drained in a similar manner. The same uncertainty as to the existence of a liver abscess was experienced in this case, and was only removed by exploratory puncture; the patient made an uninterrupted recovery. Strongly advised to quit Hong Kong, he positively refused to abandon his appointment. I saw him in excellent health, as he said, better than for a long time previous to the operation, about a year and a-half afterwards, on my returning to England, and a few years later, Mr. Cantlie left him in Hong Kong in excellent health.

CASE III.—A third case, a naval petty officer, was treated in the same manner with Manson's trocar and cannula, and associated drainage, proceeded, convalescent, to England, and doubtless returned to his duty.

MEMORANDA:

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

ANTITYPHOID SERUM AS A CURATIVE AGENT.

W. S., aged 28, a farm labourer, was seized on July 14th, 1902, with abdominal pain and sickness. He called in medical aid on July 16th. The symptoms at first pointed to appendicitis, later to generalized peritonitis. But, after a few days of high temperature and noisy delirium, all abdominal tenderness disappeared. The temperature rose gradually to the neighbourhood of 104°, at about which point it remained up till July 26th. He had by this time fallen into a condition by day entirely apathetic, from which he could but be roused to answer questions, though at night he generally woke up to noisy and violent delirium. Having made a provisional diagnosis of enteric fever, and, having had a confirmatory report from the County Council's laboratory based on Widal's test, on July 26th I injected 10 c.cm. of Burroughs and Wellcome's antityphoid serum which I had by me. Next day, being Sunday, I was unable to get more serum from London, but on July 28th I injected another dose of 10 c.cm. After the first dose the temperature fell to 99.8° on the morning of July 27th. The distension of the abdomen, which had been marked for the last two days, had disappeared; he was quite sensible, in marked contrast to his condition for the last seven days. The morning temperature on July 28th was 100°; after a second injection on that day it fell to subnormal, and never afterwards was raised above the normal limits. By August 20th the man was well, though he had not wholly recovered his strength. In confirmation of the reaction to Widal's test the urine was found to show swarms of bacilli having the appearance and character of typhoid bacilli. I finished up by giving him a course of urotropin in the interests of the public health.

This is the fourth case in which I have used antityphoid serum alone, the first one being of average severity. The other three (all of which I have published) have all been desperate cases in which I only used it because there seemed nothing else left to be done. This man would probably have lived in any case, unless one of the unhappy complications of enteric had supervened. Of the other three cases, I am positive (as were all who saw the cases) that the serum was the means of saving two lives; the third case was that of an elderly woman with