

injected. Experiments No. 3 and 4 prove that the lesions are transitory; hence the necessity for the repeated injections advocated by Bayon, but the same lesions are produced by other acid-fast bacilli.

7. A culture, 8 days old, on ascitic agar of *Bacillus phlei* was emulsified in 2 c.c. of salt solution. 1 c.c. of the emulsion was injected into the peritoneal cavity of a guinea-pig. The health of the animal was not affected, and three weeks later it was killed. The parietal peritoneum was covered with an enormous number of tubercles. There were rows of miliary tubercles on the peritoneal covering of the intestine. The intestines were matted together, and the appearance resembled that seen in tuberculous peritonitis. There were nodules on the surface of the liver and spleen; the surface of the lungs was covered with miliary tubercles. Smears from the nodules showed enormous numbers of acid-fast bacilli. The smears were similar in every respect to those obtained from leprosy lesions rich in bacilli. In sections the nodules showed caseation and necrosis.

8. 1 c.c. of the emulsion of *Bacillus phlei* was heated for 20 minutes at 100° C. and then injected into the peritoneal cavity of a guinea-pig. Its health was not affected, and it was killed three weeks later. No tubercles were found in the lungs, but otherwise the findings agreed with those in experiment No. 7.

Exactly similar experiments were performed with the smegma bacillus. In the animal inoculated with the live bacilli, peritonitis with extensive caseous tubercular deposits was observed. In the animal inoculated with dead bacilli there was much less evidence of peritonitis, and only two nodules were observed; they were on the surface of the liver.

Experiments similar to Nos. 7 and 8 were made with Rabinowitsch's bacillus. In the animal inoculated with the living organism only one caseous nodule was observed; it was in the omentum, and in smears from it acid-fast bacilli were found. In the animal inoculated with the dead organism no morbid changes were observed.

The caseating and necrotic character of the lesions produced by these organisms are comparable to those produced by Kedrowsky's organism. The transitory character of the lesions is also comparable. It is obvious that they could be renewed or maintained by further inoculations, as has been done by Bayon. The lesions produced by the living organisms are the same as those caused by the dead organisms, but similar lesions are not produced by inoculations of emulsions of leprosy tissue. There is therefore no evidence that the acid-fast bacillus of Kedrowsky is the leprosy bacillus.

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LONDON SCHOOL OF MEDICINE FOR WOMEN.—On June 24th Princess Alexander of Teck presented the prizes won during the winter session by the successful students at the London School of Medicine for Women. The chair was taken by Miss Aldrich-Blake, the dean, who said that the number of new entries for October next already far exceeded those of the preceding year.

## Clinical Notes:

### MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

#### TWO CASES OF GASTRIC AND DUODENAL PERFORATION: THE USE OF "CORNER'S PLUG."

BY H. W. MILLS, M.R.C.S., L.R.C.P. LOND.

IN THE LANCET of Jan. 31st, 1914, p. 355, Mr. William S. Dickie criticised the use of "Corner's plug" in duodenal perforations. That an omental or gauze plug in such cases is not only often necessary owing to the exigencies of the case, but often very successful, I think few surgeons of experience will dispute. The condition of the patient is generally more or less desperate. The perforation of the bowel is frequently of considerable size, and the local condition usually such that stitches will not hold unless extensive infolding be done, a procedure which results in such narrowing of the duodenum as to make necessary immediate posterior gastro-enterostomy, for mechanical reasons.

Now, whereas posterior gastro-enterostomy, together with occlusion by plication of the duodenum—for without such occlusion posterior gastro-enterostomy is useless—is the proper treatment when the patient is in good condition and is operated on within a few hours of the perforation; yet such is emphatically not good treatment when the patient is desperately ill and every moment is of great importance; on the contrary the "Corner's plug" is here the method to use in the interests of the patient. Gastro-enterostomy can easily be done if necessary, which often it is not, a little later on.

The following cases will help to substantiate the above statements:

CASE 1.—The patient, a man aged 32, was brought into the Ramona Hospital, San Bernardino, California, a distance of 50 miles from the country, with obvious symptoms of perforated duodenal ulcer. Pulse 128, very weak and irregular; temperature 97.4° F. The history showed that the patient was addicted to alcoholic excesses and had suffered from periodical attacks of "indigestion," the pain coming on several hours after meals and being relieved by food, also by bicarbonate of soda. Twenty-eight hours previously, his stomach being empty at the time, he had suddenly been taken with severe abdominal pain which had caused him to fall down and collapse. A medical man was called, who gave him a dose of morphine at once. Thereafter he felt somewhat relieved, although several subsequent injections of morphine had to be given to relieve the pain. Board-like rigidity of the abdomen obtained, also great pain and tenderness over the duodenal site.

On opening the abdomen a large perforation half an inch in diameter was found in the first part of the duodenum anteriorly. The edges were friable and would not hold sutures, and infolding to the extent of rendering satisfactory suture feasible would have almost occluded the lumen of the gut. Gastro-enterostomy was out of the question owing to his desperate condition. The opening was plugged with a large tag of somewhat inflamed omentum held in place by one catgut suture, and a gauze wick surrounded by indiarubber tissues led down to the site of the lesion and the wound closed around it. The pelvis, which contained a considerable amount of yellowish fluid, was sponged out, and a drainage-tube led into the pouch of Douglas through a suprapubic stab wound. The patient was placed in Fowler's position and proctoclysis by Murphy's method was instituted. The tube was removed in 48 hours.

The patient made an uninterrupted recovery and declined to consider a subsequent gastro-enterostomy. He has remained quite well.

CASE 2.—The patient, a woman aged 29, with no previous history of indigestion or any other trouble, was brought into hospital 12 hours after the rupture of the duodenal ulcer had occurred. The symptoms were typical and her condition was bad. Pulse very weak and rapid.

On opening the abdomen a small anterior perforation in the first part of the duodenum was at once found and closed by suture; the pelvis was drained as in Case 1. Eight days subsequently a secondary rupture occurred, but the patient was now in a much better condition, and being in hospital was re-operated upon within half an hour. The duodenum was occluded by plication, a posterior gastro-enterostomy was done, and the patient promptly recovered and has remained well.

CASE 3.—The patient, a woman aged 45, on whom I had performed panhysterectomy five years previously for a 12 lb. fibroid of the uterus, was admitted with a recently perforated duodenal ulcer. Her condition was good. The perforation was closed by suture, the duodenum occluded by plication, and a posterior gastro-enterostomy was done. A rapid recovery was made and she has remained well.

Cases 1 and 2 would probably have died had immediate gastro-enterostomy been done. Case 1 would probably have recovered just as well had a gauze plug been substituted for the omental one; but Mr. Corner recommends that his gauze plug be removed under an anæsthetic in 48 hours, whereas when an omental plug is made use of the cigarette drain can be removed in five days without an anæsthetic.

San Bernardino, California.

#### A CASE OF EXTRAORDINARY TRAUMATIC DEFORMITY WITH ŒDEMA.

BY P. C. PERHAM TAYLOR, L.R.C.P. & S. EDIN., &C.

THE patient, a woman aged 46 years, was born at Whitting, Sussex. At the time of birth she was quite natural. When about 2 years old, on her mother taking her out of bed one night, she fell. There was no history of any previous fall or accident. All use went out of her legs. She was put to bed, and the doctor was sent for. She lay unconscious for about six weeks. On recovery her legs and arms were deformed, but there was no swelling.

About three years ago swelling of the legs set in, and they have been gradually getting into their present condition, as shown in the photograph. She came into the Hailsham Union Infirmary at that time. She is able to sit up in bed, and amuses herself with fancy work, &c.

Her present condition is as follows. She is most cheerful

and suffers no pain, only a feeling of heaviness in the legs, which is relieved when she is tapped, about every six weeks. The heart and lungs are normal. The bowels act only with aperients. The urine is normal; no albumin. She has always been regular, the flow being abundant and painful, until the menopause, which occurred about two years ago. There is no swelling of the arms or hands, though the latter are deformed, as is shown in the photograph reproduced.

Family history: Her father died at the age of 51 years from Bright's disease. Her mother is alive, aged 74, and suffers from her heart. Of her brothers, two are alive, aged respectively 41 and 38, both being healthy; two are dead, one at 21 from phthisis and one in infancy. One sister is alive, aged 56, and is healthy; three died in infancy. There is no history of any paralysis in the family.

I am indebted to Mr. F. S. Parker, chemist, High-street, Hailsham, for the photograph.

Hailsham, Sussex.

#### AN UNUSUAL CASE OF PERFORATED ULCER OF THE ŒSOPHAGUS.

BY GRAHAM W. CHRISTIE, M.B., CH.B. EDIN.,  
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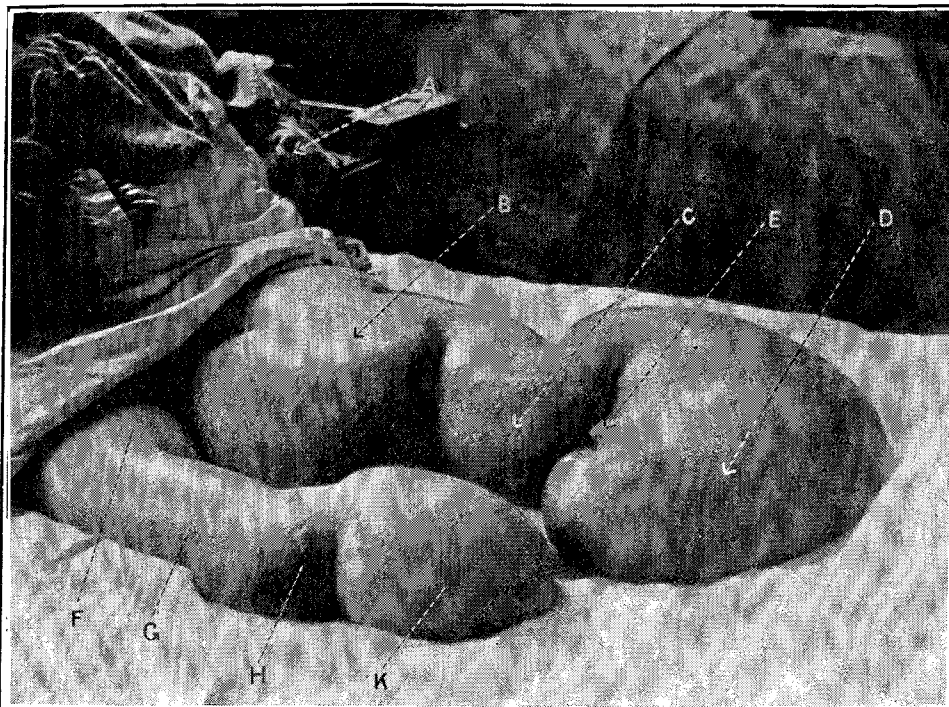
THE patient, aged 60, was admitted to Stockport Infirmary on June 21st, at 1.30 A.M., suffering from intense dyspnoea and complaining of acute pain all over the abdomen. The history was that he was in perfect health until 8.30 P.M. on the previous evening, when after a few glasses of beer he was taken ill suddenly with violent pain in the epigastrium, which doubled him up and was soon followed by an attack of vomiting.

On admission the patient was suffering from collapse and intense dyspnoea, simulating a bad attack of asthma. The temperature was 99° F., the pulse-rate 125, and the respirations shallow and 50 per minute. What he complained of most was intense pain in the epigastric region and acute

stabbing pain in the back. His condition differed, however, from that experienced in perforated gastric ulcer in that he was most comfortable and had least pain when he sat bolt upright in bed.

On examining the abdomen there was found to be practically no movement on respiration, and it was rigid all over. There was marked tenderness on palpation over the epigastrium, and the most tender part of all was in the upper

*Illustrating Mr. P. C. Perham Taylor's Case of Traumatic Deformity.*



A, Left hand; B, Left femur; C, Left tibia; E, Left big toe; D, Left foot; F, Right femur; G, Right tibia; H, Right heel; K, Right foot. It is impossible to tell, owing to the swelling, where the left knee is, as the patella cannot be felt.