sisted and her strength was notably below par. On April 19 she fell on a marble staircase in her hotel and sustained a scalp wound, which entailed a moderate loss of blood and required several stitches. Then for the first time she came under medical observation, and on April 22 a nurse was employed. During the ensuing four days her temperature ranged from 99.6 to 102.8, and on April 25 several rose spots were discovered on the abdomen.

Clinical History.—She was at once removed to the Garfield Memorial Hospital with a diagnosis of typhoid fever. On admission no Widal reaction could be obtained, the urine showed the presence of albumin and hyaline and granular casts, a blood count gave the number of leucocytes as 8,132, and a vaginal examination showed considerable discharge from a senile endometritis. The temperature fell gradually until, on May 1, it was normal. The negative result of the Widal test, the subsidence of the temperature, and the discovery of other conditions which might account for some constitutional disturbance caused the abandonment of the idea that she was suffering from typhoid infection. She left Washington and came directly to her home in New Haven, still weak, but able to be up and dressed.

I saw her for the first time on May 8, when, about 8 a. m., she had a sharp chill lasting about one hour, with her temperature rising to 104. This was followed by a continued fever, which lasted until May 23, the temperature declining by lysis. On May 10 one characteristic rose spot was found on the abdomen. The vaginal discharge ceased shortly after her arrival in New Haven. During the febrile period there were no toxic symptoms, and her convalescence was uneventful.

Laboratory Findings.—The laboratory findings at various times were as follows:

April 25, blood examination by Dr. H. H. Donnally, Washington, showed hgb., 65 per cent., no Widal reaction, 12,700 leucocytes, no plasmodia, and slight poikilocytosis.

April 26, at the Garfield Memorial Hospital, the leucocytes numbered 8,132. April 27, at the same hospital, urine examination resulted as follows: Color, lemon; reaction, acid; appearance, cloudy; specific gravity, 1,010; albumin, a faint pus trace; a few hyaline and finely granular casts; a moderate number of flat epithelial cells, some round cells, one cuboidal cell, and a large number of leucocytes.

May 9, Dr. C. J. Bartlett, professor of pathology in Yale University, examined the blood and found 5,288 r. b. c., 8,980 w. b. c., no plasmodia malariæ, and a partial, though insufficient response to the Widal test. Differential count gave 66.5 per cent. of polymorphonuclear leucocytes, 26.75 per cent. small mononuclears, and 6.75 per cent. large mononuclears.

May 13, Dr. Bartlett made a second Widal test which resulted in a somewhat more pronounced clumping, but still not sufficient for a positive diagnosis. His urine examination showed rather less than 0.01 per cent. of albumin, some granular casts, and a few pus cells.

June 18, urine examination by Dr. D. M. Lewis, bacteriologist of the board of health of New Haven, showed a trace of albumin and marked bacilluria. From this specimen, which was obtained by catheter under strict precautions, a pure culture of the colon bacillus was isolated.

June 27, Dr. Lewis obtained a positive Widal reaction, and no reaction from the organism found in the urine.

The clinical history and laboratory findings thus show that the patient suffered from a mild typhoid infection, with a relapse; a coincident senile endometritis; and a subacute nephritis caused by the colon bacillus.

THE CURE OF TUBERCULOUS PERITONITIS.

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It has long been known that if a case of primary tuberculosis of the peritoneum is operated on, the peritineal cavity merely opened and then closed, the disease undergoes a retrograde change, the patient sometimes recovering permanently.

At one time it was supposed that the iodoform sprinkled in the cavity of the peritoneum had something to do with the cure. Again, others thought that the simple entrance of air was a factor.

It has occurred to me after aiding in the opening of the peritoneum in a case of primary tuberculosis of that cavity, that the surgeon unwittingly performed Pfeiffer's phenomenon. After simply opening the peritoneum evacuating some fluid and closing it the patient began to improve and now, after three months, is nearly well. Instead of the air doing any good, the improvement may have been wrought by the access of some of the patient's blood to the serous cavity. The blood, no doubt, in all such cases contains some immune serum and the serous fluid contains some complement, perhaps.

Immune serum plus complement, plus tubercle bacilli, may effect a bacteriolysis of the latter, as in the case of cholera bacilli, when some serum from an animal immunized against cholera bacilli and the natural serum (complement) in the peritoneal cavity, if mixed either in the peritoneal cavity or in a test tube, effect a solution of the bacilli. Members of the myco-bacteriacæ group (tubercle bacilli) do not dissolve ordinarily in the presence of either immune serum or some complement serum or both, but they may do so in the body. Or, the admixture of the immune serum with the peritoneal contents may effect a destruction of the bacilli by reason of the opsonins that it may contain, or in some other way stimulate phagocytosis.

At any rate, it would do the patient very little harm to allow some of his own blood to remain behind in the peritoneum after a section, and I write this merely as a suggestion to surgeons to try this simple experiment of leaving a few drams of blood behind before closing the abdomen in tuberculous peritonitis cases that come to operation.

In support of this theory that the free blood in the peritoneum effects a cure in some cases, I need but mention that in those cases that are thoroughly irrigated recovery is not nearly so apt to take place.

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CESAREAN SECTION PERFORMED BY A COW.

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[We recently received a newspaper clipping giving an account of a pregnant woman being gored by a cow, the abdominal walls and the uterus being lacerated so that the child was born. We wrote to Dr. Morse about the matter and he states that the newspaper account was correct. His report follows.—ED.]

Mrs. W. E., aged 31, pregnant at full term with her third child, was standing in the road about 60 feet from the house, watching her husband unload hay from a wagon. A vicious two-year-old heifer charged her and inserted a very sharp horn into the abdomen near the anterior superior spinous process of the ilium. It penetrated the abdominal wall, uterus and membranes, but escaped the child. The point of the horn then emerged again just to one side and below the umbilicus. The result was two transverse rents, the upper one about 5 inches long and the other clear across the abdomen. The child was delivered through the larger opening and fell to the road, where it was picked up by the father. I made an eight-mile trip and arrived about 20 minutes after the mother's death from hemorrhage. The uterus was outside the body, torn clear across and inverted, with afterbirth and membranes, still attached. The child is still alive and doing well. I have found histories of several similar cases in Gould and Pyle's work on medical curiosities.