

in width. It is thus irregularly oval in shape, the widest portion being just above the center. The borders of the ulceration are for the most part irregular and the edges in many places are distinctly undermined.

On the lowermost portion of the thigh, the patellar region and the uppermost portion of the tibia, the ulcerating process has destroyed the integument only, leaving on the floor of the ulcer the fascia and subcutaneous tissues generally; while on the upper and inner side of the thigh the subcutaneous structures have also disappeared; at one point a narrow ridge of subcutaneous tissue extends entirely across the deeper portion of the ulcer to be connected with the corresponding tissue above. This projecting line of tissue, however, is distinctly undermined and is easily separated from the deeper structures. The edges of the ulcer are indurated and thickened, while the floor is distinctly nodular. These nodules, for the most part, are small and single, generally not exceeding a large hazel-nut in size; they are fissured somewhat irregularly by sulci, which extend for a variable distance, in the median line, even down to the bone. The entire surface might well be described as resembling a cauliflower mass. The surface of the ulceration is bathed in a small amount of whitish-yellow semi-fluid pus, of a slightly offensive odor; not infrequently small collections of pus or milium abscesses are encountered; and pressure causes small drops of pus to exude from the sides of incisions.

Bacteriologic Examination.—In the cover-slip preparations not a few round, homogeneous, non-nucleated, bodies about six to twelve mikrons in diameter were seen, both when stained and unstained. Apparently budding forms were also met. These were probably degenerated epithelial cells. Numerous and extensive culture experiments failed to reveal any colonies of blastomycetes. The pus contained innumerable bacteria of all kinds and there were isolated and identified, bacillus pyocyaneus, bacillus subtilis, bacillus coli communis, micrococcus tetragenus, staphylococcus pyogenes aureus, staphylococcus pyogenes albus, streptococcus pyogenes, and irregularly stained micrococci not stained by Gram's method.

Microscopic Examination.—Numerous sections from all parts of the ulceration and stained by various methods were examined. All present essentially the same structure. The striking feature is a rather coarse but intricate network of narrower and wider ribbons composed of cells mostly of the type of the prickly cells of the rete. Wherever the surface is covered by epithelium, narrow down-growths of this kind are given off. At frequent intervals the bands of epithelial cells present rather small bulbous and spindle-shaped enlargements of connective layers of flattened and horny cells, which stain by Gram's method. Small whorls are also found in the anastomosing cellular bands; isolated whorls, some quite large, were also present. Many of the epithelial cells are vacuolated—dropsical degeneration—and many curious cell-forms are seen; in some places the nucleus refuses to stain or is very small, the protoplasm staining deeply with eosin and with gentian-violet; these degenerative changes in varying degrees are scattered quite diffusely throughout the sections. The stroma is often of a rather marked fibrous character; here and there are accumulations of cells mostly of the polymorphonuclear and lymphocytic type; occasionally small abscesses are seen in the stroma, often opening on the surface of the sections. Here are found various kinds of bacteria, but no yeast-like bodies. The vessels generally have thick walls and in some are leucocytic thrombi, in other places newly-formed vessels are present. The carcinomatous tissue extends deeply into the tissues of the thigh, especially in the central parts of the ulceration, replacing the muscles, the nerves being the seat of a marked interstitial process.

I have lately examined the patient and found him in excellent health, having gained over thirty pounds in weight, and there is no sign of recurrence of the disease. The lymphatic glands in the groin were much reduced in size, showing that in all probability their enlargement was due to secondary pus infection from the eroded surface rather than carcinomatous invasion.

COLOSTOMY FOR THE CURE OF AMEBIC DYSENTERY.*

WILLIAM NORBERT SULLIVAN, M.D.

SAN FRANCISCO.

Although medical treatment of dysentery yields good results in many cases, a large number of dysenteric patients succumb in spite of careful and painstaking treatment. The unqualified success which has attended the use of colostomy in the treatment of the case which I present leads me to believe that many patients die because the application of remedies to the diseased portion of the bowel is impracticable by ordinary methods.

The pathological description, as given by Osler,¹ assists us in comprehending the difficulty which is experienced in treating some cases of dysentery. It can readily be conceived that if the ulcerated portion of the colon is situated at a distance from the rectum, i. e., if it occupies the ascending colon or the cecum, any fluid injected will have difficulty in reaching the diseased area and, if it should reach it, it will not remain long enough in contact with the affected surface to accomplish its remedial action. Furthermore, the character of the ulceration, with its sinuous tracts and undermined edges, is a feature which, in itself, renders the application of solutions difficult and impossible, at times, when indirect methods are used.

The treatment of dysentery, according to our best text-books, is restricted to dietetic measures, to remedies given by the mouth, and to remedies applied to the large intestine by means of injections into the rectum.

Rectal injections have often been attended with success, but many patients do not respond to any method of treatment, grow progressively worse and finally die.

The case which I present serves as a good example of the resistance of the disease to nearly all measures used in the treatment of dysentery, as the patient was sick a year and a quarter before I saw him and during that time had submitted to the most careful treatment by capable surgeons both in the Philippines and in San Francisco.

F. C., aged 35, enlisted in the First California Volunteers, May 4, 1898, and sailed on the transport *Pekin* for Manila, May 25. He was well until about December, 1898, when he had a slight diarrhea, which was not sufficiently severe to prevent his remaining on duty. In February, 1899, while on the firing line, he became quite sick and was given bismuth by the surgeon. On February 27 he entered the Ermita Hospital—the field hospital—and while staying there was on a dietetic and medicinal treatment. Among the remedies used were nitrate of silver injections and quinin injections. He remained either at the Ermita, or at the general hospital until May, 1899, when he was transferred to Negros Island and entered the hospital at Bocolod. He remained there until July 3, and then was consigned to the transport *Sherman* and sent home. While on the *Sherman* he passed much blood and mucus and some large membranous shreds.

On Aug. 24, 1899, he entered the hospital at the Presidio, San Francisco, and there received treatment until Oct. 11, 1899, but did not improve. From Oct. 11, 1899, till April 4, 1900, he was confined to his home in this city without methodical treatment. He could get about the streets a little, but was very weak, was having from eight to twenty passages a day, and was never sure at any moment that he would not have an evacuation. He was also suffering extreme pain in the abdomen.

On April 4, 1900, I saw him at his home and found him in a deplorable condition. He was extremely

* Read before the San Francisco Medico-Chirurgical Society.

1. Text-book on Practice of Medicine, pp. 132-133.

emaciated; he was suffering and his voice was weak. At times he endeavored to concentrate his mind on a game of cards or similar amusement, but found it impossible to do so. He lay around the house all day, not venturing to go out, and took milk and occasionally eggs as diet. If he took meat it caused great irritation and numerous watery evacuations.

I had another case of dysentery, also contracted in the Philippines, which had recovered under the use of large injections of sulphocarbolate of zinc—15 grains to the pint—and I thought it would be an easy matter to accomplish the same result in this case. But although I used these injections faithfully every day and took the greatest care with the diet, the patient became progressively worse. His stools, consisting of water, mucus and blood, numbered from ten to twenty a day. He became very weak, his voice became low and whispering and he could scarcely rise in bed.

The antiseptic solution was evidently not reaching the ulcerated patches in the upper part of the intestine, for while the local tenderness had disappeared over an area represented by the descending and the neighboring part of the transverse colon, the right portion of the transverse and the ascending colon became more tender, until the most exquisite pain and tenderness existed in this region. It was evident that while the solution was relieving the pain and inflammation as far as it penetrated, it was only aggravating the more remote region of the cecum and the ascending colon by exciting severe peristalsis.

At this juncture Dr. J. Henry Barbat suggested the feasibility of performing a right inguinal colostomy and flushing the bowel through the opening thus made. By this he expected to accomplish two things: 1, give rest to the inflamed bowel by preventing the feces from passing over it; 2, allow a large flushing irrigation of a portion of the bowel which was probably not reached by injections into the rectum.

The patient was removed to the hospital April 21, 1900, and was operated on by Dr. Barbat April 25, the bowel being brought up and attached to the abdominal wall. On April 30 the bowel was incised and a stream of pyrozone solution—half a pint to the gallon of sterile water—was passed through the large intestine and as the peristalsis operated it passed out by both outlets, the anus and the artificial anus, thus thoroughly flushing the whole of the large intestine. This treatment was continued daily.

Before the operation the patient had a temperature varying from 99 to 104 F., but on May 2, two days after the operation, it was normal. The pain, which had been excruciating and agonizing, ceased immediately after the first few days and he began to eat well of a soft diet, including fish. He gained flesh rapidly. He was kept under this treatment from April 30 until Aug. 30, 1900—four months—when the opening was closed and the bowel dropped back into the abdominal cavity. While the patient was in the hospital careful examination of the feces was made, and the amebæ coli, which were found in large numbers before the operation, disappeared a few days after the operation and could not be demonstrated after. He now weighs 151 pounds, has but one or two evacuations a day, and feels well and free from pain.

This case I believe demonstrates the utility of this measure in the treatment of dysentery. The method certainly possesses two cardinal points of value: 1, it affords rest to an inflamed surface; 2, it permits direct applications of remedial solutions to a portion of the

bowel which is practically beyond the reach of injections into the rectum.

REMARKS BY DR. BARBAT.

The abdomen was opened for a distance of two inches at the external border of the right rectus muscle, and the intestines were examined as far as the fingers could reach. The small intestine appeared normal, but the cecum and ascending colon were very much thickened and of a dull gray color, the normal luster of the peritoneum being diminished. Rolling the cecum between the fingers showed that the bowel was not uniformly thickened, some spots feeling thinner than normal, but the greater portion felt about one-quarter of an inch thick, and of a brittle consistency, showing all the coats to be very much infiltrated. The appendix was swollen, but not congested; it was cut off close to the cecum and the opening closed with two rows of catgut.

The colon was sutured to the peritoneum with interrupted black silk sutures, and sterile dressings applied. The gut was opened on the fourth day without anesthesia and the intestine flushed with antiseptic solutions.

The opening did not close spontaneously, and necessitated an operation, which was done four months from the first one.

The bowel was separated from the abdominal wall down to the peritoneum, which was easily found on account of the black silk sutures, which were all removed. When the abdominal cavity was opened, the fistulous tract was cut off flush with the bowel and the opening closed with fine catgut. The colon was very much thinner than at the first operation, and the bowel had a more normal appearance. The abdominal wound was closed in the usual manner and the wound healed per primam.

LUPUS HEALED WITH ROENTGEN RAYS.

REPORT OF CASE.

WM. ALLEN PUSEY, A.M., M.D.

Professor of Dermatology in the College of Physicians and Surgeons of Chicago, Medical Department of the University of Illinois.

CHICAGO.

The patient, a married woman aged 38, was referred to me May 8, 1900, by Dr. H. B. Favill, with a diagnosis of lupus and for treatment with Roentgen rays. The condition at that time is shown in the accompanying photograph, Fig. 1, which I took when I first saw her. The extent of the disease on the left side of the face and the neck is indicated in the photograph. It also extended over on the right side of the chin and up on the right cheek beyond the angle of the mouth. This entire area was covered with lupus ulcers and unhealthy scars. The ulcers were the typical flabby, soft, indolent ulcers of lupus covered with reddish-brown crusts. The scars were thick, red, band-like and very disfiguring. The scars were most marked under the chin and they were sufficiently rigid to materially interfere with motion. At many points in the scars there were recurrent ulcers. Typical "apple-jelly" tubercles of lupus were easily demonstrable in any part of the diseased area. The point of greatest activity of the lupus was an area with a diameter of perhaps two inches around the left angle of the mouth. The ulcers involved the mucous membrane of the lips at this point, but no lesions were found within the buccal cavity. There was no evidence of tubercular involvement of the deeper structures. There were no deep sinuses and no tubercular glands. The case was, in short, a lupus and not a scrofuloderma.

The disease began, the patient thinks, about four