President Eisenhower's Operation for Regional Enteritis: *

A Footnote to History

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THE RIGHT of any President of the United States to a certain amount of privacy cannot be gainsaid. On the other hand, the illness of any President is a matter of great concern to the nation, as it has always been, and it now has become a matter of great concern to the whole world. It is the right of the people of the country to have the facts while the illness is in progress. When it is over, it becomes history. It is with full realization of the historical implications that we make this report, for which we have General Eisenhower's gracious and unconditional permission, on his operation for small bowel obstruction secondary to regional enteritis in June 1956.

It is noteworthy that of the 35 Presidents of the United States—the present incumbent is not included in this list—four died in office, President Harrison, in 1841,[7] President Taylor, in 1850,[1] President Harding, in 1923,[11] and President Franklin D. Roosevelt, in 1945,[6] and that four were assassinated, President Lincoln, in 1865,[4] President Garfield, in 1881,[8] President McKinley, in 1901,[9, 10] and President Kennedy, in 1963. Of the remainder, President Jackson[2] was chronically ill during both terms of office. President Wilson[3] had a disabling illness that made him a practical invalid for the last two years of his second term. President Cleveland[5] had a resection of his maxilla for a sarcoma in the first year of his second term in 1893, from which he recovered apparently completely. Except for President Kennedy's death, all of these illnesses and deaths are now on record in the medical literature. It is, therefore, appropriate that the details of President Eisenhower's operation be added to these accounts.

Case History

Present Illness: President Eisenhower, then 65 years of age and the thirty-fourth President of the United States, was taken ill with vague ill-defined discomfort in the lower abdomen about 12:30 a.m. on Friday, June 8, 1956, nine months after a myocardial infarction from which he had made a satisfactory recovery. His personal physician, GEN. Howard McC. Snyder, was called and arrived at the White House 30 minutes later.

The first examination of the abdomen revealed no particular point of tenderness, but moderate distention and tympany were evident. The pulse at this time ranged from 94 to 100/min., with occasional extrasystoles, and the blood pressure was 140/100 mm. Hg.

For the next few hours, the President slept fitfully. At 6:00 a.m., a tap water enema, by which feces and flatus were expelled, gave no relief; nor did a second enema which returned clear. Meantime, the pain had gradually assumed a colicky character and centered around the umbilicus and

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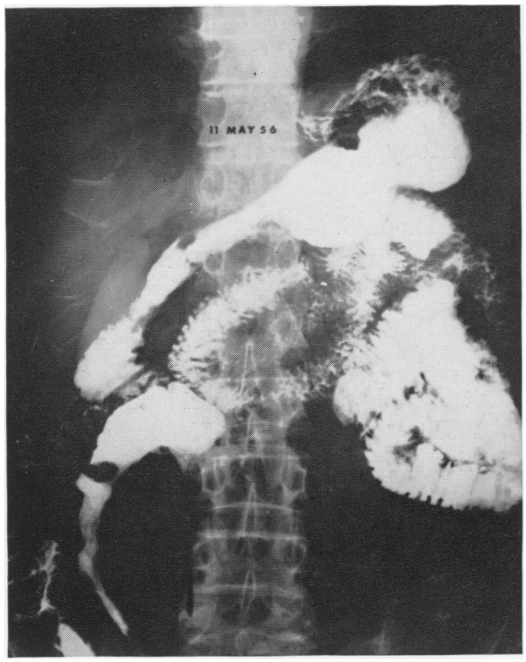

FIG. 1. Small bowel series showing localized regional enteritis in the terminal ileum performed on May 11, 1956. No *skip* areas are seen.

in the right lower quadrant. No flatus was passed, and distention became more prominent. At 10:30 a.m. the patient vomited 1,500 cc. of bile-stained fluid, without solid material or undigested food. The pulse was then regular at 92/ min., but the blood pressure had fallen to 100/76 mm. Hg.

The first consultant summoned by General Snyder to see the President was COL. Francis W. Pruitt, MC, Chief of Medicine, Walter Reed General Hospital. He found the President listless, apathetic, perspiring freely, with his skin somewhat cool and clammy and with his normal ruddy color absent. The pulse was then 120/min. and not of good volume, and the blood pressure was 105/70 mm. Hg. The abdomen was moderately distended and there was some generalized resistance but no rigidity.

COL. Pruitt's initial impressions were: 1) Intra-abdominal bleeding related to anticoagulant therapy; or 2) Small bowel obstruction secondary to regional ileitis; or 3) Intestinal perforation with peritonitis.

A hemoglobin concentration performed at the White House gave a value of 21 Gm.% (as compared to 16.5 Gm.% a month earlier), which effectively ruled out the first possibility as the cause of the President's shock-like picture.

After 600 cc. of 5 per cent glucose in water had been administered, the systolic blood pressure rose to 115 mm. Hg and the pulse dropped to 100 per minute. It was now thought that the President could safely be moved, and he was, therefore, transported by ambulance to Walter Reed General Hospital, where he arrived at 1:30 p.m.

At this time his shock-like state had abated. Physical examination immediately after admission revealed the temperature to be 37.5° C., the pulse 94/min. and the blood pressure 120/80 mm. Hg. The President's face was rather flushed, but he was mentally alert and seemed in no great distress. The remainder of the examination was negative except for the abdomen, which was somewhat distended and tympanitic. There was rather diffuse tenderness but no evidence of rebound tenderness. There was an area of dullness to flatness over the right lower quadrant. Bowel sounds were hypoactive, with occasional high-pitched sounds. No abnormal mass was felt.

Meantime, the four surgical consultants summoned by General Snyder, MAJ. GEN. Leonard D. Heaton, and Drs. Isidor S. Ravdin, Brian Blades and John H. Lyons, were asssembled at the hospital by 6:00 p.m. Two of them (L. D. H. and I. S. R.) were out of the city and arrived, respectively, from Gloucester Point, Virginia, and Chicago, Illinois. COL. Thomas Mattingly, MC, who had treated the President during his cardiac illness, was also summoned.

Previous History: The President's previous medical history of significance revealed that in 1923 his appendix had been removed at Fitzsimons General Hospital after several episodes of right lower quadrant pain beginning about a year earlier. Histopathologic study revealed "chronic catarrhal appendicitis." Over the subsequent 33-year period he had had episodic lower abdominal pain, and in November, 1947, a diagnosis of partial small bowel obstruction had been entertained. Spontaneous resolution of the clinical picture occurred.

The President had had no other abdominal surgery, but because of recurrent abdominal pain, numerous gastro-intestinal roentgenograms had been obtained over the years. It was not until a month before this hospital admission, however, that a small bowel series, performed by COL. Elmer Lodmell, MC, Chief of Radiology, Walter Reed General Hospital, revealed a picture typical of regional enteritis involving the distal ileum (Fig. 1).

Laboratory Data: Blood study gave the following values: Hemoglobin, 15.8 Gm.%; hematocrit, 49; white blood cell count 10,600/mm.^{3}, with 74 per cent polymorphonuclear leukocytes. Blood chemistry revealed serum sodium 137.5 mEq./

L.; potassium 4.9 mEq./L.; chlorides 104 mEq./L.; and CO_2 17.7 mEq./L. These values revealed, in addition to dehydration, a metabolic acidosis.

Two electrocardiograms showed no evidence of recent myocardial damage. Evidence of the old myocardial infarct was the only abnormal finding. Serial films revealed increasing dilatation of small bowel, probably the jejunum.

Preoperative Course: With the present x-ray findings and the knowledge of the findings in the examination a month earlier, the diagnosis of small bowel obstruction secondary to regional enteritis seemed the most tenable explanation of the presenting clinical picture.

At 1:00 a.m. on June 9, 1956, still more marked distention of the involved loops of small bowel (Fig. 2) prompted the unanimous opinion of all those responsible for the care of the President that surgery was indicated. The opinion was succinctly stated in a note written on the chart by Dr. Ravdin:

> "There can be no doubt that the President has intestinal obstruction of an acute nature. The films made of his large and small bowel on May 11, 1956, disclose areas of the terminal ileum which are identical with those seen in an area of regional enteritis with "skip areas."
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> "He has drained moderately from his gastric tube, but in spite of this the number of loops which are distended has increased as recorded in the last x-ray over that taken at 1830 hours.
>
> "The abdomen is softer. Peristalsis is present at times. The pulse has shown a tendency to become more rapid.
>
> "He has passed no gas by rectum. Urinary output of 490 cc. shows that his kidneys are functioning.
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> "The dilemma facing us is whether to delay operation further or to go ahead and side-track the area of obstruction. Because the distended gut area has increased, because the condition has existed for 24 hours, because operation with the patient in good condition is safer than waiting until the necessity of operation is forced upon us, I favor intervention.
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> "The only alternative to this would be long tube (Miller-Abbott) intubation, which, if it gives evidence of emptying the small gut is defensible. If it does not give such evidence promptly, I would again favor laparotomy."

Confronted with a 65-year-old patient, whose obstruction was apparently increasing in spite of the correct application of nonsurgical measures, whose blood chemistries revealed signs of perversion, and who had a recent history of cardiac infarction, there seemed little justification for the highly dubious course of further delay in the hope that the blocked bowel would release itself. Instead, as time passed, there seemed every justification for the course which was adopted, surgical intervention without further delay, while all the circumstances were still favorable.

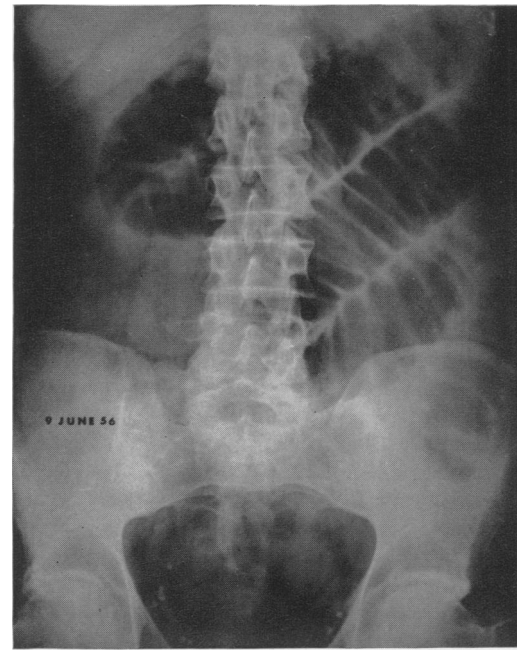

FIG. 2. Roentgenogram of the abdomen revealing dilated jejunal loops performed at 1:00 a.m., June 9, 1956. The diagnosis of small bowel obstruction of a high degree is obvious.

Preoperative preparation consisted of nasogastric decompression; parenteral fluids (2,000 cc. of 5% glucose in physiologic salt solution and 1,000 cc. of 5% glucose in water); penicillin 300,000 units every six hours; and streptomycin, 0.5 Gm. every 12 hours. Potassium chloride 20 mEq. was added to the fluids.

Operation: At 2:20 a.m., June 9, 1956, anesthesia was induced by COL. Harvey C. Slocum, MC, Chief of Anesthesiology, Walter Reed General Hospital, with pentothal sodium (Thiopental sodium) and nitrous oxide-oxygen. Cyclopropane and ether were used to maintain the plane of surgical anesthesia, with curare for muscle relaxation. The endotracheal technic was used. Electrocardiographic observations were made during the one hour and 54 minutes of surgery, from 2:57 a.m. to 4:51 a.m. The President's condition at no time gave rise to any anxiety.

When the abdomen was opened through a right paramedian incision, there was a moderate amount of straw-colored fluid in the peritoneal cavity. Dense adhesions presenting between the greater omentum and the appendectomy scar in the right lower abdomen were divided. Their lysis brought into view the ileum, whose terminal 30 to 40 cm. presented the typical appearance of chronic so-called dry regional enteritis. That is, the involved area was grayish-red, thickened, indurated, and contracted, with claw-like projections of mesenteric fat to the antimesenteric border. The contiguous mesentery was thickened, shortened, and opaque, but there were no large, succulent lymph nodes within it. The pathologic process just described was sharply demarcated, and no skip areas were noted.

The small bowel immediately proximal to the involved area was greatly dilated and moderately edematous, but the color was pink, and the attached mesentery was normal in length, consistency, and translucency.

No other abnormalities were found on further exploration.

Ileotransverse colostomy was performed in continuity by the standard two-layer technic, using interrupted silk sutures in the outer layer and continuous chromic catgut sutures in the inner layer.

One hundred cc. of neomycin (1%) was injected into the colon at the site of the intended anastomosis before the bowel was opened. Spillage was kept to a minimum by careful packing and aspiration. Palpation of the stoma revealed that the anastomosis was adequate. Five hundred cc. of blood were given during the operation.

The procedure described was carried out without incident of any kind. At its end, the blood pressure was 130/80 mm. Hg, the pulse 84, and the respirations 20.

Postoperative Course: The usual postoperative measures were employed, including nasogastric suction, intravenous fluids, analgesics, and penicillin and streptomycin. Postoperative ileus occasioned some concern, but it was well controlled with gastric suction. When flatus was passed in good quantities on the fifth postoperative day, the tube was removed and oral feedings were cautiously begun. They were so well tolerated that solid food was taken and retained by the seventh postoperative day.

Vital signs were never a cause for anxiety. At no time did the pulse exceed 100 or the respiration 24, and both were usually below these levels. The highest immediate postoperative temperature was 37.9° C. by rectum, and the only time the reading exceeded this level—it was usually well below it—was on the eleventh postoperative day when it reached 38.2° C. on one occasion, as the result of a minor wound infection. This infection was the only real complication in the postoperative course. There were no cardiovascular difficulties at any time. Anticoagulant therapy, which had been discontinued before operation, was reinstituted on June 27, 1956.

The President was ambulated on the first postoperative day, June 10, and daily thereafter for increasingly long periods. He received official visitors (Secretary of State Dulles and Chancellor Konrad Adenauer of West Germany) and transacted official business on the fifth postoperative day, June 14, and daily thereafter.

On the sixth day, one of the surgical residents on round-the-clock duty with him wrote in the progress notes, "This patient feels and acts like a well man." This was the President's status when he left the hospital on the twenty-first postoperative day.

Discussion

There is, of course, no necessity for further justification of our decision to operate promptly on a patient with regional enteritis in which the complication, obstruction of the small bowel, was the primary and dominant problem. From the strictly surgical point-of-view there exists the necessity of explaining our use of a procedure, that is, the in continuity bypass which is considered by most authorities and by ourselves as an inferior procedure in the surgical management of the majority of cases of regional enteritis. Resectional therapy or bypass in discontinuity are our preferred procedures for treating florid or so-called wet types of regional enteritis, and there was considerable criticism of our use of the operation that was chosen.

The reasons for our use of ileotransverse colostomy in continuity were as follows:

1. Surgical operation was primarily designed to relieve ileal obstruction and had to be performed expeditiously.

2. President Eisenhower's regional enteritis was not of the wet type. Instead, it was typical of the life history of the disease as it progressed through the florid stage, without the development of complications requiring operation in his younger years,

to reach the cicatrized, dry or burned-out stage that is unlikely to progress or recur.

3. The operation was performed as an emergency procedure, which made it impossible to prepare the bowel for major resectional therapy. In addition, it was thought that resection would be too much surgery in a patient who had had a relatively recent myocardial infarct.

4. It was thought unwise to perform ileotransverse colostomy in discontinuity for two reasons: 1) if the distal ileum, after transection, were closed proximal to an obstruction and dropped back into the abdomen, there was a risk of a blowout, a risk believed to be too great; and 2) if this procedure had been elected, then it would have been necessary to create an ileal fistula for safety, which would have lengthened the duration of the operation and would have necessitated a second procedure later.

Comments on the selection of operation arrived by letter and wire from numerous known and unknown colleagues, many of them surgeons but many of them from decidedly remote specialties. A professor of preventive medicine, for instance, did not think that the bypass we had created could possibly prove competent. We came to welcome the opinion of the physicians who limited their public statements to the effect that only surgeons with a close-up view of the Eisenhower peritoneal cavity had any right to comment on what had been done within it. One reporter stated it quite well when he wrote that criticism multiplied in direct ratio to the distance of the critics from the operating room and from the patient.

We wish to emphasize again that regional enteritis was not our immediate problem. Instead, our overwhelming problem was how best to handle a patient with obstruction of the small bowel; a patient who had not responded to conservative measures; a patient whose blood chemical tests had been affected unfavorably by the duration of the obstruction; a patient who was 65 years old and who had a background of recent cardiac disease; and, finally, a patient who required emergency operation and who, therefore, could not undergo the regimen considered desirable, if not imperative, in intestinal resection.

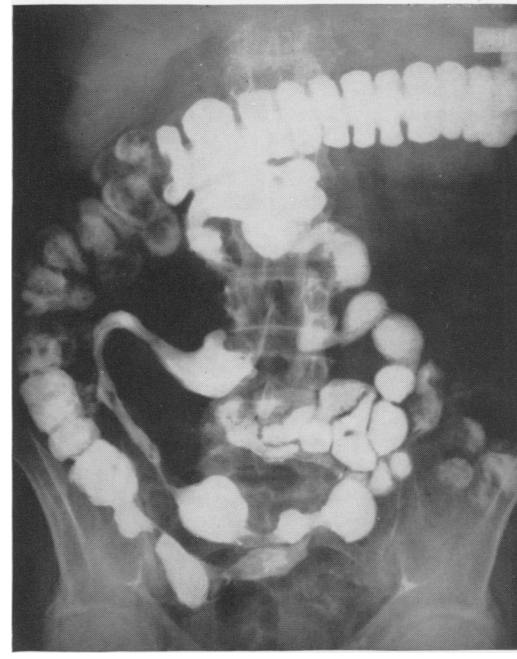

FIG. 3. Small bowel series in May, 1963, showing a well-functioning ileocolostomy stoma. The regional enteritis lesion in the terminal ileum is unchanged except for further cicatrization. The proximal small bowel is normal and *skip* areas are not seen.

Conclusion

Seven and a half years have passed since that memorable night in June, 1956, and during this time General Eisenhower has remained without symptoms from the diseased terminal ileum which was then bypassed. The lesion, as observed on roentgenograms of the small bowel, appears the same in May, 1963 (Fig. 3) as it did in May, 1956 (Fig. 1). There has been no development of skip areas. The disease, therefore, has remained static, and obstructive symptoms, for which the operation was performed, have been completely relieved by ileotransverse colostomy in continuity. We have never wavered in our belief that time would justify the decision made during those fateful hours.

Acknowledgment

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