Mark M. Ravitch

A giant in the field of surgery was lost with Mark Ravitch's passing. It is virtually impossible to summarize his accomplishments in a brief biographic sketch. Dr. Ravitch was born in New York City, September 12, 1910, of Russian immigrant parents. He attended the University of Oklahoma and achieved a Bachelor of Arts in Zoology in 1930. He spent 13 years at Johns Hopkins, from medical student through his surgical residency. It was there that he developed his extraordinary productivity in research and in writing. He remained on the staff until 1952, at which time he assumed the position of Director of Surgery at Mt. Sinai Hospital in New York. He returned to Johns Hopkins in 1956, rising to Professor of Surgery and Surgeon-in-Chief at the Baltimore City Hospitals. In 1969 he assumed the position of Professor of Surgery at the University of Pittsburgh, at which institution he remained.

Ravitch's analysis of intussusception in infants and children led to the nonoperative treatment of the disease by using hydrostatic pressure reduction through barium enema. He was the national authority on the correction of chest wall deformities and was recognized for his original contributions in the management of congenital diaphragmatic hernias. He is considered the innovator of the sphincter-saving alternative in the management of inflammatory bowel disease and familial polyposis, the subject for this "Classics" presentation. In reading the article one recognizes the technical achievement of successfully reestablishing continuity in two ulcerative colitis patients and demonstrating that the procedure could be performed without a protecting ileostomy. The functional results, at least in this preliminary study, were excellent. Ravitch also introduces the feature of mucosal stripping to limit the likelihood of recurrent disease while still maintaining continence. The principles of his procedure were subsequently modified by Alan Parks with the pouch-ileoanal procedure (Br Med J 1978;2:85-8).

Another of his outstanding contributions to surgery was the introduction and development of the mechanical stapling devices in the United States. This came about as a result of his excursions to Russia. His fluency with the Russian language was in no small measure responsible for his success.

Ravitch was the author or coauthor of more than 450 papers and editorials, as well as 100 chapters in texts. Additionally, he wrote a two-volume chronology, A Century of Surgery, which documented the history of American surgery for the past 100 years. The list of his honors and contributions encompass a curriculum vitae of 51 pages. Mark Ravitch passed away on March 1, 1989, in his 79th year.

Anal Ileostomy with Sphincter Preservation in Patients Requiring Total Colectomy for Benign Conditions

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The advisability of preserving the anal sphincter in carcinoma of the rectum is currently being discussed more actively than ever before. The procedure presented here may be considered apart from that discussion because it is proposed for nonmalignant disease and because it is the ileum which is brought down through the anal sphincter to the anal skin.

It is clear that in benign conditions requiring total colectomy there is no need for removing the sphincter muscles and it remains to be certain only that a colectomy is required and that satisfactory bowel habit can be established with an anal ileostomy.

Regarding the necessity for total colectomy, I find it required in some cases of ulcerative colitis and in most cases of polyloid adenomatosis of the colon. In severe Hirschsprung's disease a subtotal colectomy has occasionally been performed with an anastomosis of the ileum to the rectal ampulla. In that condition there is no need to excise all of the rectal mucosa.

In chronic nonspecific ulcerative colitis operative treatment is a confession of ignorance and an admission of inadequacy, but at present an ileostomy performed early in the disease is often a lifesaving measure. By early performance of ileostomy, one hopes to arrest the disease before the colon has been hopelessly damaged, so that it may subsequently be possible to reanastomose the bowel. This desideratum is not often achieved, although in an occasional patient one may be justified in attempting to restore intestinal continuity. However, our interest has been centered in two other groups of patients. In the first group are those patients who after ileostomy still have active disease of the colon with pain and discharge of blood and pus and the threat of perirectal abscesses and fistulas. Such patients will be greatly benefited by removal of the diseased colon, and in the past it has been the practice at this hospital to perform a total colectomy, the last stage of which is an abdominoperineal resection of the rectum. It has been the general experience, as demonstrated again by the patient in Case 1, that a segmental colectomy is inadequate and offers little hope for subsequent restoration of intestinal continuity. The disease is usually most severe in the rectum—the very segment which would be left behind. In the second group are those patients who are apparently well after ileostomy, without symptoms from the retained colon, but whose disease has progressed so far and produced such extreme changes in the colon that there is no hope of ever restoring intestinal continuity. In the first group with persistent colonic infection the necessity for colectomy is generally conceded and it is proposed merely to modify the operation by providing a continent anal ileostomy. In the second group even though the colonic disease is quiescent, colectomy is proposed, as a means of relieving the patient from a life-long abdominal ileostomy. Some will wish to add that cancer occasionally develops in the retained rectum. About 2 per cent of individuals with chronic ulcerative colitis are said to develop carcinoma of the colon or rectum. One further point must be made. So far as we know, there is no necessity to resect more than the mucosa, if any purpose can be served by leaving the other coats.

In polyloid adenomatosis of the colon it is generally agreed (Pugh and Nesselrod and Lockhart-Mummery) that most or all of the patients with this condition will ultimately develop carcinoma of the colon unless colectomy is performed. Surgeons have long been tempted to compromise by performing a subtotal colectomy, anastomosing the ileum to sigmoid or rectum, and treating the tumors of the remaining segment with the electocautery. Lillienthal, Soper, Erdman, and Tom Jones, Lockhart-Mummery, Stone and Rankin have all reported successes by this method. However, in many such patients cancer has been reported to develop subsequently. One such patient has been observed at this hospital and at the 1947 meeting of the Society of University Surgeons two patients were reported who developed cancer in remaining segments of the large intestine after partial colectomy for adenomatosis of the colon. There are few times when it is given to a surgeon to say, as it is in this condition, that he can prevent a cancer which would otherwise surely occur. To leave the rectal segment is a dangerous compromise, since despite the removal of most of the colon it is precisely in the segment which remains that cancer usually develops!

In June, 1947, observations were reported on dogs with a one-stage total colectomy and anal ileostomy with preservation of the sphincter. This procedure has been applied to two patients with ulcerative colitis. A third patient with familial polyloid adenomatosis of the colon, one of five members of his family so afflicted, has had a subtotal colectomy and ileostomy but has not yet had the procedure completed.*

* Read at the meeting of the Society of University Surgeons, New Orleans, La., Jan. 29-31, 1948.