Inflammatory Tumors as a Cause of Benign Rectal Stricture*

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The purposes of this study have been to make a fairly comprehensive survey of contemporary knowledge of different causes of benign stricture of the lower part of the large intestine and to determine the clinical characteristics of inflammatory tumors of the colon and rectum. The reason for this dual objective is that it is almost impossible to differentiate the two entities.

A review of medical literature seems to indicate that there is a fairly constant approach to the problem. Information, provided by these reports and my own personal experience with cases observed at the Vargas and University Hospitals in Caracas, indicates that frequently we are faced with controversial issues.

Pérez Carreño3 was perhaps the first to call attention to the relatively low incidence, in Venezuela, of malignant lesions of the colon and rectum and the comparatively high incidence of inflammatory diseases. A review of the last 60,000 admissions to the Vargas Hospital and the first 50,000 admissions to the University Hospital reveals that only 114 cases could be found of malignant tumors of the colon, including the rectum. Forty-three cases of inflammatory lesions or inflammatory pseudotumors were found.

Statistics obtained from different hospitals, and the official records of death rates published by the Public Health Service and Department of Sanitation, prove that, in Venezuela, pathologic conditions of the colon differ greatly from those encountered in the United States and other countries.

In this presentation, various forms of inflammatory lesions caused by parasites, and occurring infrequently in the United States, will be discussed. A classification of benign rectal strictures is provided in Table 1.

Incidence: Most cases of inflammatory stricture of the rectum in this series were caused by the virus of venereal lymphogranuloma, as was shown by a study conducted by Pérez Carreño over a period of 20 years. Inflammatory rectal strictures occur about three times as often in women, most of them occurring between the ages of 20 and 30 years. They are usually observed in a low class of people, perhaps because of their poor hygienic, social and economic conditions. Usually these patients are seen in general hospitals and only rarely in private practice.

Pathology: Benign strictures are characterized by the presence of a mass with gross features characteristic of definite tumors. Histologically most of them consist of a specific pathologic process, and it is on this basis that we designate them as bilharziasis, amebomas, and so forth, according to their cause, although sometimes we refer to them as pseudotumors of bilharziasis and amebic tumors of lymphogranulomatous origin.

Briefly, the characteristic features of each are as follows:

Bilharziasis: The original lesion is ulceration of the intestinal mucosa produced by *Schistosoma mansoni*, or by direct action of toxins liberated by the eggs on the intestinal wall. In either event, there is ulceration of the mucosa followed by an inflammatory reaction which heals by fibrosis. If one or more female parasites...
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invade an arterial branch and lay their eggs, they will reach the tissues supplied by this small artery, produce a proliferative type of reaction and form pseudopolyps with numerous ova which can be seen on microscopic examination. Depending on the degree of infestation, the intestinal wall will show changes which vary from superficial proliferation, or ulceration, to formation of a definite mass.

Amebiasis: This mechanism of action is different. The mucosal ulceration produced by the ameba occurs at the site of entrance of microorganisms into the mucosa with formation of secondarily infected amebic ulcers. There is a process of healing and reinfecation which gives rise, in the occasional case, to a fibrotic lesion of the submucosa and muscular coats with thickening of the entire intestinal wall. Grossly, its appearance is similar to that of a scirrhou type of carcinoma. More frequently, however, the amebic infection may present itself as a large ulcer surrounded by a marked inflammatory reaction, resembling an ulcerated carcinoma.

Venereal Lymphogranuloma or Nicolas-Favre Disease: In this condition development of an inflammatory stricture depends chiefly on the lymphatic drainage of the region. The virus usually invades the rectal and perirectal lymphatics, no matter where the primary lesion occurred, producing blockage which, in the presence of secondary infection, favors the growth of fibroblasts. Contracture of resulting scar tissue gives rise to characteristic benign rectal stricture. In the male, the primary lesion is usually in the rectum and occasionally in the urethra; in the female, it may be in the rectum, vagina or cervix uteri.

In many cases the virus reaches the rectum by direct contact, as seen in the homosexual individual. The virus may reach the rectum by accidental contact or by invasion of nearby afferent lymphatics of the rectum and sigmoid. Multiple sites of inoculation may be observed in the same patient, giving rise to rectovaginal, rectoperineovaginal or inguinal lesions.

The disease spreads through lymphatic channels only. Jaffé and Pérez Carreño, who have done extensive work in this field,

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