Colorectal Polyps

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The term "polyps" should be limited to an intraluminal undiagnosed growth prior to microscopic examination. The most common intestinal polyp is the "adenoma" (smooth or villous) which is a gland-like structure. Its greatest clinical significance resides in its controversial relationship to carcinoma; this problem is, at present, in a state of man-made confusion which is unfortunate.

Histologic evidence for malignant transformation was first claimed in Europe as far back as 1891. This claim since has been periodically voiced on other continents. While this opinion predominated for some time there has always been a healthy minority opinion against transformation from adenoma to carcinoma. In the United States, Samuel Earle, as early as 1911, and Pennington, in 1923, had found no clinical or other evidence that adenomas became malignant. Pennington stood his ground alone in opposition to such contemporary medical giants as Mallory, Lockhart-Mummery and W. J. Mayo. Recent clinical and histologic studies support the theory of nontransformation of adenomas into carcinomas; it has been held that the cancer potential of the adenoma is no greater than that of the surrounding mucosa. There is clinical evidence that this also may be true of the villous (papillary) adenoma which is considered by some workers as the "villain" and has, therefore, had a "bad press" as far as the cancer potential goes. The only uncontroversial feature about the adenoma is that it is controversial.

This stand is subject to change, of course, whenever the newer histochemical, electronmicroscopic and other recent sophisticated investigations bring forth solid evidence in favor of transformation. To date such confirmation has not only been lacking but there is no unanimity of interpretation of the meager results of these studies among the involved researchers.

It has been established that CEA were observed in all types of polyps. It is also present in noncancerous intestinal mucosa including hemorrhoids.

The present confusion is the result of numerous factors. Absence of communication is one, and very serious. The clinician and the pathologist do not understand each other and do not always (but should) talk the same language. Many sophisticated pathologists themselves are unclear and do not agree among each other as to the precise histologic criteria of malignancy; in doubtful cases some pathologists render a diagnosis of malignancy largely in fear of missing one. The morphologic process (the static factor) is frequently as misinterpreted as the biologic process (the dynamic factor) about which we know so little. If the professional pathologists cannot agree among themselves, how can clinicians? One is reminded of the adage "the expert is seldom in doubt, but frequently in error."

The contemporary literature reports an incidence of asymptomatic adenomas varying from 1.6 percent to 12 percent in the general population. The percentage is increased to 70 percent in necropsy
material when a magnifying lens is employed. Little, if any, consideration has been paid to the observation that in elderly individuals adenomas may be the natural product of the aging process.

The concept that "every adenoma removed is a carcinoma prevented" has led to the wholesale recommendation for removal of adenomas, even in sub-risk patients. Theoretically, this means surgical intervention in one of every two patients who are 60 years old with a possible iatrogenic risk and mortality far in excess of the risk of cancer.

Those who do not believe in transformation of adenomas into invasive killing cancer nevertheless advocate removal for microscopic diagnosis of all lesions.
(total biopsy) situated within the reach of the conventional sigmoidoscope (25 cm. or 10 inches long). If the lesion is benign, complete therapy is simultaneously or automatically achieved. Lesions situated above the reach of the sigmoidoscope are individualized. Pedunculate lesions are removed through a colotomy incision if they cause significant bleeding and/or abdominal cramps. In the absence of these symptoms or in poor-risk patients, this lesion does not have to be removed immediately on recognition. Watchful waiting or even a modicum of therapeutic neglect is justified in the poor-risk patient. On the other hand, in the presence of a sessile lesion regardless of its size, an intestinal resection (a cancer operation) is preferred so as not to miss the golden opportunity of removal of an unrecognized or latent polypoid early invasive cancer. This policy is especially applied to the normal-risk patient. If the lesion proves to be benign, resection is still warranted as intestinal continuity is re-established.

Preoperative periodic radiographic observation of the lesion for growth (hence possible malignancy) is not without risk. Absence of proof is no proof of absence. Nor is this procedure acceptable to the average intelligent patient who abhors equivocation or indecisiveness.

For emphasis, an additional word about the villous adenoma: This lesion is considered dangerous because it may contain an invasive cancer, but not because it is a precursor of malignancy. It should, however, be stressed that until convincing proof becomes available, the coexistence of invasive carcinoma with villous adenoma is considered guilty by association and not guilty by transformation—a coincidence and not a complication. This tenet mandates a conservative therapeutic approach. Thus anal sphincters are saved in the treatment of totally benign rectal villous adenomas regardless of size or those that contain an area of noninvasive (cytologic) cancer.

A number of intestinal surgeons have recently adopted this policy. If following this conservative procedure a coexisting invasive carcinoma is discovered, especially in the depth or base, an abdominoperineal resection of the rectum is performed without regard to the preservation of the anal sphincter. The few days thus lost have never been unsalutary in the general scheme of things.

Neither Marshak nor I has observed a high incidence of invasive malignancy in pedunculate adenomas as reported recently.

Removal of polyps, especially the pedunculate ones in any part of the colon via the coloscope, is particularly practiced by two individuals. The complications accompanying this procedure are not "advertised," as is the performance of coloscopy. (See the editorial in the November 1972 issue of the New York Journal of Medicine.)

Drexler recently reported that there is a substantial increase in the number of polyps in cigarette smokers and patients with arteriosclerotic disease. I am following this lead.

Marshak and Linder showed that the pedicle, regardless of its length, may, in the presence of malignancy, shorten or even disappear and result in a defect in the bowel wall resembling an ulcerating cancer.