

Recurrent Carcinoma of the Rectum

Surgical Treatment

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ONE OF THE MOST baffling problems in modern surgical therapy is the treatment of recurrent carcinoma. Treatment is highly individualized, variations depending on multiple, specific factors and findings. In a large majority of patients the primary concern is the relief of symptoms. Secondarily and hopefully, in full recognition that the survival or curability rate will be extremely small, it is to prolong life. In each case decisions must be made as to how much or how little to do. It is the purpose of this presentation to discuss the common types of recurrence following operations for carcinoma of the rectum and the various surgical procedures that are employed in the treatment.

Most surgeons treating large numbers of patients with carcinoma, come to the realization that, irrespective of the type, size, location or extent of the lesion only a generalized guess can be made as to its future behavior. This individuality of carcinomas necessitates individualized methods of treatment. Therefore, successful treatment of any carcinoma, primary or recurrent, depends not only on the experience, judgment and limitations of the surgeon and the condition of the patient, but apparently also on factors of which we have little knowledge and cannot control. Whether there actually exist variations in host resistance or biologic predeterminism⁵ of neoplasms makes little difference in our current methods of treatment. Since we have no control of these unknown factors, we must fit the treatment to the circumstances in each case on the basis of our present limited knowledge.

Often patients return with obvious recurrence and evidence of distant metastasis. X-ray studies may show pulmonary or bony involvement. The liver may be enlarged and there may be ascites, or there may be other signs of obvious generalized carcinomatosis. Except to prove the diagnosis, there can be few if any indications for operations in these patients. Yet it should be emphasized that even in these cases it is mandatory to prove the findings are the result of recurrent carcinoma. There can be no excuse for overlooking or misdiagnosing a primary carcinoma of the lung, for example, or hepatic cirrhosis or other entirely unrelated disease.

There are other cases, however, in which there are

• Following operations on the rectum for carcinoma, approximately half of the patients have recurrence in the perineum, pelvis, abdomen or at the suture line of anastomosis. The prognosis is almost uniformly poor and although the problems of management are complicated, dealing with them may give the patient worthwhile physical, emotional and economic benefits. Surgical procedures used in the treatment of the common types of recurrence are discussed.

signs of recurrence but definite indications for operation—palpable masses, pain, bleeding, signs of obstruction, lesions or suspicious conditions visualized sigmoidoscopically or in x-ray studies. Once the diagnosis has been established, careful thought must be given to whether some surgical procedure might reasonably be expected to benefit the patient or might only increase his illness or hasten his death. Many patients with recurrent carcinoma seem to have a rapid deterioration of condition after surgical intervention. Crile² expressed belief that even simple laparotomy in some patients may speed the dissemination of cancer. In studies currently being carried out on the dissemination of cancer in animals, controlled experiments have given evidence that the stress reaction initiated by simple skin incisions increases the growth and dissemination of cancer.

As to the opinion that the wide removal of invaded lymph nodes seems to hasten the spread of the disease by removing natural lymph barriers, we have observed patients in whom this apparently was the case, yet there were others in whom the disease appeared to be retarded or unaffected. The continuing argument as to the choice between conservatism and super-radicalism in operations for cancer probably cannot be settled until some accurate method can be found for determining the individual biologic characteristics or metastatic potential of each tumor. Meanwhile each surgeon treating each patient must be guided by his experience and his clinical impressions, tinted with optimism and the promise of tomorrow. Although current methods of treatment are in the main unsatisfactory and unrewarding, to avoid any tendency toward under-treatment we have adopted the attitude so ably expressed by Ferguson³ that the patients should be treated with the idea of doing the most good, not the least amount of harm.

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From this hopeful point of view it is obvious that the early diagnosis of recurrent carcinoma is of the utmost importance. Hence, regular periodic post-operative examinations are advisable. If there is to be recurrence, it is most likely to happen in the first two years. If the surgeon has a firm understanding with each patient from the beginning as to the necessity for these examinations, a high proportion will return regularly. We feel strongly that sigmoidoscopy or coloscopy should be carried out in addition to a careful examination of the abdomen, pelvis and perineum. Also x-ray examinations of the colon should be done at regular intervals of a year or two.

The rectum is the most frequent site of carcinoma in the gastrointestinal tract. Regardless of the level of the lesion in the rectum, the most commonly employed surgical treatment is combined abdomino-perineal resection with permanent abdominal colostomy. A common site of recurrence is the perineum. Frequently the lesions are entirely local, involving only the scar, and wide excision can be curative. Sometimes when there is merely a suspicion of a mass, exploratory incision is necessary to confirm a diagnosis of recurrence. The technique of excision used in such cases resembles that used in dealing with malignant disease of the breast. First the exploratory incision should be closed in order to prevent recurrence from desquamation in the wound. Then, after a change of gloves and instruments, wide excision is performed, the wound flushed with Chlorpactin (monoxo chlorosene) or nitrogen mustard and left open to granulate and heal by secondary intention. If the tumor is anterior, excision of the posterior vaginal wall usually is necessary in women, and in men it may be necessary to do a wide dissection of the anterior triangle and resection of the prostate. Persistence of a sinus tract or failure of the perineal wound to heal should arouse suspicion of recurrence. In these circumstances exploration is in order, and wide excision if indicated. If the lesion is too extensive for complete excision, we leave a catheter deep in the wound, surrounding it with loose gauze packing, for instilling 30 mg. of nitrogen mustard daily for three successive days. In one case in which there was obvious extension of the perineal recurrence into the bladder, complete healing of the perineum followed this procedure and the patient had no further complaints for 19 months of observation up to the time of this report.

Not infrequently suspicion of recurrence is first aroused by colostomy dysfunction or intermittent signs of obstruction. If recurrence is found at laparotomy, there can be little hope of cure. Commonly in such cases a loop of small bowel is bound down and obstructed by dense carcinomatous masses. Often the masses involve the bladder or ureter. When the loop of bowel can be resected without

vigorous handling or the risk of damage to adjacent vital structures, resection and anastomosis is performed. If resection entails laborious and risky dissection with probability of scattering viable cancer cells, a short-circuiting procedure, enteroenterostomy or enterocolostomy, in a relatively cancer-free area of the abdomen is the procedure of choice.

For carcinomas occurring in the middle of the upper rectum, many surgeons are using sphincter-saving procedures, either the abdomino-perineal proctosigmoidectomy (pull-through procedure) or the anterior resection with low primary anastomosis. One less obvious advantage of the use of either procedure is the possibility of earlier detection of local recurrence by digital or sigmoidoscopic examination. With evidence of recurrence in the perineum, pelvis or at the suture line, the surgeon is faced with the possible need to do a combined resection with permanent colostomy, or perhaps palliative fulguration. Usually no decision can be made until the abdomen is explored and the extent of the recurrence determined. Local extension to the bony pelvis, bladder or female organs may be contraindications to removal of the growth. On the other hand, distant metastasis, to the liver or lungs, may not gainsay resection provided there is a clear-cut indication for it. If combined resection is not done, diversion colostomy should be reserved for patients with impending obstruction, for in our experience, many patients in such circumstances die before obstruction can develop, and without the additional burden of colostomy. A question for consideration when operation for recurrent carcinoma is being contemplated is whether the comfort of the patient might not be served as well by adequate use of narcotic drugs.

It is not within the scope of this paper to discuss the use of chemotherapy and supervoltage radiation in the management of recurrent rectal carcinoma. In the increasing medical literature on the subject there are encouraging reports of palliation by these agents. Many of the patients we have operated on have received combined therapy with evident benefits.

We believe that too often patients with recurrent and incurable carcinoma are abandoned to physical, emotional and economic suffering, and that they deserve treatment, not in spite of but because of the hopelessness.

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