THE SURGICAL PROBLEM OF RECURRENT CANCER OF THE CERVIX*

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A deeply pessimistic view for the patient with cancer of the cervix recurrent after radiation therapy or combination of radiation therapy and surgery prevails today among surgeons, gynecologists and radiation therapists. However such views are not justified because cancer of the cervix often remains within the confines of the pelvis for a period of time even though initially and unsuccessfully treated by radiation or surgery. This tendency to remain localized affords the possibility of renewed surgical attack upon these lesions, which types of surgery while unusually radical in most instances need not be mutilating where the recurrences themselves are of limited size, detected early and may fortuitously not involve bladder or rectum. Interest in this problem now seems to be developing and is attested to by the recent Congress of the Italian Society of Obstetrics and Gynecology held in Genoa (Sept. 28 to Oct. 1, 1963), during which half of the meeting was devoted to a discussion of this subject.

While radiation therapy is capable of curing an appreciable number of patients with cancer of the cervix, it is generally admitted that re-radiation, apart from the exceptional instance, has little to offer as a curative therapy after initial failure. There are indeed well documented instances of such "cures" but in many instances of purported control of the disease at a second attempt, the reports do not substantiate the diagnosis of recurrence by biopsy.

My interest in this problem was forced by the fact that among 1778 patients with cancer of the cervix seen on the Gynecological Service in Memorial Hospital between Sept. 1947 and December 31, 1957, 834 or 47% were patients with recurrent cancer after treatment elsewhere usually by radiation, as well as patients with recurrences after surgery performed elsewhere or by us. All patients are regarded primarily as surgical problems and operations recommended consistent with surgical judgement, riches and extent of the recurrent growth. Recurrence is defined as reappearance of a lesion proved by biopsy after a period of clinical freedom from cancer. Persistent cancer is defined as the presence of a lesion proved by biopsy to be cancer, six months after previous treatment without there having been a period of clinical healing. In this report, persistence and recurrence are discussed together. Obviously many of these patients had metastases beyond the pelvis and thus were not amenable to local surgical procedures envisaging cure. Table I summarizes the 834 patients and what was done for them. Sixty-seven percent were subjected to operation (575 patients) but in only 379 patients could an operation be performed to excise the growth macroscopically, in 196 patients exploratory laparotomy or some purely palliative procedure was carried out.

TABLE I

MANAGEMENT OF 834 PATIENTS PREVIOUSLY TREATED FOR CARCINOMA OF CERVIX MEMORIAL CENTER - Sept. 1947-Jan. 1958

Memorial management	*Total No.*	*Living and well 5 years*
Definitive surgery	379	96 (25.3%)
Exploratory laparotomy (Re-irradiation 37)	124	2*
Palliative surgery (Re-irradiation 10)	72	0
Re-irradiation only	45	2
Refused treatment	38	3
Consultation	8	2
No treatment offered	56	0
Definitive surgery for radiation necrosis	55	38
Successful treatment elsewhere Follow-up only	29	23
Radiation complication (No ca present)	28	19
Total	834	185 (22.2%)

* No biopsy confirmation.

The various types of operations carried out envisaging cure, are summarized in Table II. As in any surgical problem each case is individualized and under the varying conditions presented the surgeon must decide for himself which of several operations is to be carried out under the specific circumstances. There cannot be *one operation* for all cases of recurrence any more than there can be one operation for all cases of cancer of cervix. Surgical judgement, the size of the lesion, etc., all enter into the choice of the operation for that patient.

The five year salvage for the 115 patients who did not receive some form of exenteration and therefore did not have ostomies, is 43 per cent with a surgical mortality of 3 (2.6%), defined as death within 30 days of operation regardless of cancer.

Among the 261 patients who had some form of pelvic exenteration therefore having one or more ostomies, the salvage rate was 18 per cent but accompanied by a surgical mortality of 18 per cent. This relative high mortality is due to the fact that this series includes the initial endeavors in performing

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TABLE II

SURGICAL PROCEDURES FOR 379 PATIENTS WITH RESIDUAL OR RECURRENT CARCINOMA OF THE CERVIX (Sept. 1947-1957 INCLUSIVE)

Operation	No.	*Living and Well 5 years*	*Surgical Mortality*
Total hysterectomy	2	1	1
Wertheim hysterectomy	6	1	
Schauta vaginal hysterectomy	1	0	
Hysterectomy and node dissection	68	29	1
Stump and node dissection	19	6	1
Vaginectomy and segmental resection sigmoid	1	0	
Vaginectomy and node dessection	15	11	
Vaginectomy	1	1	
Vulvectomy and excision clitoris	1	0	
Anterior resection sigmoid	1	0	
TOTALS	115	49 (43%)	3 (2.6%)
Anterior exenteration	74	14	9
Posterior exenteration	5	0	
Total exenteration	184	32	39
Partial exenteration and hemipelvectomy	1	1	
TOTALS	264	47 (18%)	48 (18%)

pelvic exenterations and during this period a number of patients were operated upon leaving gross tumor behind envisaging palliative results only. These efforts were fruitless and it became evident that exenterations should not be attempted if all of the tumor cannot be macroscopically removed. Yet, since they were exenteration procedures they must be included in the series. Recent statistics for the surgical mortality incident to exenterations performed during the years 1958 to 1961 inclusive show a surgical mortality of ten per cent for anterior and total exenterations combined.

The five year salvage rate for pelvic exenterations for cancer of the cervix, related to whether or not the lesion was a recurrent one and whether or not there were lymph node metastases is shown in Table III. This is simply further documentation that a patient with an extensive local recurrent cancer of the cervix does not have the chance for survival by radical surgery that a patient does by such surgery performed as initial treatment, and that the presence of lymph node metastases in either event farther reduces the chances for survival. However, even

TABLE III

PELVIC EXENTERATION OPERATIONS FOR CANCER OF THE CERVIX-PRIMARY AND RECURRENT. 1947-1956 INCLUSIVE

Negative Pelvic Nodes	*No.*	*5 Year Survivors*
Cancer cervix	85	30(35.5%)
Cancer cervix (Recurrent)	142	29(20.0%)
Positive Nodes		
Cancer cervix	58	8(14.0%)
Cancer cervix (Recurrent)	85	5(6.0%)

though the chances are reduced among the patients with recurrences the situation in nevertheless *not hopeless.*

In concluding this discussion it is inorder to say something about the training of surgeons and gynecologists who may undertake these procedures. A gynecologist who has been following the most popular methods of treating cancer of the cervix by radiation therapy or one who perhaps might have become interested in operating upon the smaller lesions in good risk patients by carrying out the so-called Wertheim operation (not including a radical pelvic node excision) should not one day to the next decide to undertake the difficult pelvic operations examplified by radical excisions of recurrences with pelvic node dissections including exenterations. At this time the first step to achieve is a general acceptance of the fact that radical pelvic surgery can afford patients an appreciable chance for long survival if they develop recurrences. The next step is to facilitate the carrying out of these operations by encouraging those with natural talents in operative surgery to develop themselves and to alter training programs in gynecology and in abdominal surgery to permit younger men to train for this kind of work. This problem is a complex one and a detailed discussion of it is not in order here, but is certainly an important facet of the problem of recurrent cancer of the cervix.

SUMMARY

A review is present of the experiences gained in treating recurrent or persistent cancer of the cervix following initial unsuccessful treatment by radiation, or by surgery or combinations of both.

Among 838 patients 387 were subjected to a variety

of surgical procedures depending upon the extent of the recurrences. Obviously no radical procedure envisaging cure was attempted where metastases beyond the pelvis had developed. Among 115 patients who did not require some form of exenteration and therefore did not have to have ostomies the five year salvage rate was 43%. Among 264 patients requiring some type of partial or a total pelvic exenteration the 5 years salvage rate was 18%.

Because appropriate operations can afford these patients an overall 25% chance for 5 year survival after recurrences have developed but are still localized to the pelvis, it is of importance that following initial treatment whether by surgery or radiation or a combination of these, the patient should be carefully followed and at the first evidence of recurrence biopsy be secured and if positive, appropriate surgery carried out forthwith in endeavor to prolong life and offer the patient a second chance for "cure".

RESUMEN

Se presenta una revisión de las experiencias obtenidas en el tratamiento del cáncer recurrente o persistente del cérvix, seguido de un tratamiento inicial sin éxito por radiación o por cirugía o la combinación de ambos.

Entre 838 pacientes 387 fueron sometidos a una variedad de procedimientos quirúrgicos dependiente de la extensión, de las recurrencias. Evidentemente ningún procedimiento radical fue intentado con fines curativos cuando se presentaran metástasis fuera de la pelvis. Entre 115 pacientes que no requirieron algún tipo de exenteración y por esto no tuvieron que tener estomas, la sobrevida de cinco años fue de 43%. Entre 264 pacientes que requirieron algún tipo parcial o total de exenteración pélvica, la sobrevida de cinco años fue de 18%.

Por medio de operaciones adecuadas se puede proporcionar a estos pacientes un 25% de probabilidades de supervivencia de cinco años, antes que se hayan presentado recurrencias, aún localizadas a la pelvis; es de gran importancia que siguiendo al tratamiento inicial sea éste por cirugía o por radiación o combinación de éstas, el paciente debe ser cuidadosamente observado y en la primera evidencia de recurrencia por biopsia positiva, se debe llevar a cabo en seguida una adecuada cirugía para intentar prolongar la vida y ofrecer al paciente la segunda oportunidad de curarse.