

## PANEL REPORT

### Is Pelvic Radiation Beneficial in the Postoperative Management of Stage Ib Squamous Cell Carcinoma of the Cervix with Pelvic Node Metastasis Treated by Radical Hysterectomy and Pelvic Lymphadenectomy?

A report from the Presidential Panel at the 1979 Annual Meeting of the Society of Gynecologic Oncologists.

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**Radiation Therapy Series**

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**No Radiation Therapy Series**

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The topic of this panel was suggested by Dr. Richard C. Boronow, the president presiding over the 1979 meeting of the Society of Gynecologic Oncologists, and Dr. Morrow. Fairly rigid criteria were drawn up (Table 1) and mailed to over 40 members of the society soliciting individuals or institutions with a large experience who would be willing to participate. From the 20 replies the three largest series receiving adjuvant radiation therapy (RT) and the three largest observation (no radiation therapy) series were selected. In each collective group it was estimated that approximately 100 patients with pelvic node metastasis would be represented with a minimum follow-up of 2 years. The actual number of cases was much smaller than estimated in the RT group and greater in the observation group resulting in a rather large imbalance (Table 2).

The panelists were given prepared data forms to complete by filling in numbers and the institutional name in order to standardize the data as much as possible. These tables also were to be used as slides to accompany each subseries as it was presented at the meeting. The data from all series were collated and presented by

<sup>1</sup> Author of text.

TABLE 1  
CRITERIA FOR PANELISTS SERIES

1. All cases must be FIGO Stage Ib.
2. Squamous cell carcinoma.
3. No treatment prior to surgery including preoperative radiation.
4. Histologically confirmed pelvic node metastasis with no macroscopic residual disease.
5. Minimum follow-up of 2 years; 5 years preferred.
6. In the RT series, radiation must be initiated within 2 months postoperatively.
7. All cases treated by abdominal radical hysterectomy and bilateral pelvic lymphadenectomy.
8. Contemporary series, personal preferred.
9. Surgical-pathological data available.
10. Details of radiation therapy available.
11. Information regarding follow-up and complications.
12. Information on time and site of recurrence.

TABLE 2  
STAGE Ib SQUAMOUS CELL CARCINOMA OF THE CERVIX WITH PELVIC NODE METASTASIS

Radiation therapy series	Total cases	No radiation therapy Series	Total cases
Girtanner and Averette	27	Masterson	103
Austin and Shingleton	14	Morley	23
Webb	8	Webb	20
Total	49	Total	146

the panel moderator following the individual series. The discussion was initiated by Drs. Howard Ulfelder and Hugh R. K. Barber and then opened to the floor.

*Results.* Table 3 presents the survival at 2 years for both treatment groups. There was a marked drop in survival for the observation group when more than three nodes were involved by metastases. Information on bilaterality was not obtained. There is a suggestion that adjuvant radiation therapy enhances survival in patients with multiple positive nodes, but there was no measurable benefit to patients with three or fewer node metastases. The 5-year survival rates for both

TABLE 3  
STAGE Ib SQUAMOUS CELL CARCINOMA OF THE CERVIX WITH PELVIC NODE METASTASES  
COLLATED RESULTS  
SURVIVAL AT 2 YEARS

No. nodes	RT <sup>a</sup>		No RT	
	NED/Total	%	NED/Total	%
1	11/21	52	31/42	74
2-3	13/18	72	46/60	77
4-5	0/1	0	9/25	36
>5	7/9	78	9/19	47
Total	31/49	63	95/146	65

<sup>a</sup> NED, No evidence of disease; RT, radiation therapy.

TABLE 4  
STAGE Ib SQUAMOUS CELL CARCINOMA OF THE CERVIX WITH PELVIC NODE METASTASES  
COLLATED SERIES  
SURVIVAL AT 5 YEARS

No. nodes positive	RT		No RT	
	NED/Total	%	NED/Total	%
1	7/14	50	29/42	69
2-3	6/9	67	41/58	71
4-5	0/1	0	8/25	32
>5	5/6	83	7/19	37
Total	18/30	60	85/144	59

groups are presented in Table 4. These data concur with the often reported 5-year survival rates of 50% and the notion that most recurrences appear within the first 2 years after treatment.

The sites of recurrence are given in Table 5. It is interesting that while the recurrence percentage is almost identical in both groups, 9 of 18 recurrences (50%) in the RT groups were pelvic while 48/57 (84%) were pelvic in the no RT group. (Onsrud [1] noted a similar pattern of recurrence relative to therapy in a randomized series of patients with Stage I endometrial carcinoma.) The lesional size was similar in the two groups. No explanation is apparent for the earlier recurrence time of the RT cases with pelvic disease only.

The incidence of major complications was tabulated for each treatment group (Table 6). Based on these small numbers the data are consistent with the general

TABLE 5  
STAGE Ib SQUAMOUS CELL CARCINOMA OF THE CERVIX WITH PELVIC NODE METASTASIS  
RECURRENCE DATA

	Recurrence site				Lesion size (cm)		Recurrence time (months)	
	RT		No RT		RT average (range)	No RT average (range)	RT average (range)	No RT average (range)
	Total N	(% all cases)	Total N	(% all cases)				
Pelvis	5	8.2	27	18.5	3.5 (2-5)	3.7 (1-7.5)	6 (4-9)	15.8 (6-54)
C	3	6.1	8	5.5	3 (2-4)	4.3 (1-6)	6 (4-9)	11.5 (6-26)
PW	2	4.1	19	13.0	3.5 (2-5)	3.5 (1-7.5)	6 (6)	17.5 (6-54)
DM	9	18.4	9	6.2	4 (1.5-6)	4 (2-5)	12 (6-20)	10 (8-20)
Both	4	8.2	21	14.4	4.9 (3.5-5.5)	4-4.5 (1-7)	15 (9-22)	15.7 (6-48)
Unknown	2	4.1	—	—	—	—	—	—
Total	18/47	38.3 <sup>a</sup>	57/146	39.0 <sup>b</sup>	4.5 (1.5-6)	3.9 (1-7.5)	11.7 (4-22)	15.1 (6-54)

<sup>a</sup> Only 30 cases followed 5 years or more.

<sup>b</sup> All cases followed 5 years or more.

C, central; PW, pelvic wall; DM, distant metastasis.

TABLE 6  
 STAGE Ib SQUAMOUS CELL CARCINOMA OF THE CERVIX WITH PELVIC NODE METASTASIS  
 SERIOUS COMPLICATIONS

	RT group			Surgery only group				
	Total cases with complications	Percentage of all cases	Number operated	Percentage of all cases	Total cases with complications	Percentage of all cases	Number operated	Percentage of all cases
Enteric								
Obstruction	2	4.0	2	4.0	0	—	—	—
Fistula	0	—	0	—	0	—	—	—
Other	0	—	0	—	2	1.4	0	—
Urologic								
Obstruction	1	2.0	1	2.0	2	1.4	2	1.4
Fistula	1	2.0	1	2.0	5	3.4	4	2.7
Other	1	2.0	1	2.0	2	1.4	1	0.7
Other	2	4.0	1	2.0	7	4.8	2	1.4
Total	7	14.3	6	12.2	18	12.3	9	6.2

TABLE 7  
STAGE Ib SQUAMOUS CELL CARCINOMA OF THE CERVIX WITH PELVIC NODE METASTASIS  
RT GROUP COLLATED COMPLICATIONS

Type RT	Cases in subgroup	Percentage of group	Complications	
			Cases in subgroup	Percentage of all complications
< 4500 rad WP <sup>a</sup>	7	14	2	33
4500-5500 rad WP	27	55	1	17
> 5500 rad WP	14	28	3	50
Not stated	1	2	0	0.0
Total	49	100	6	100

<sup>a</sup> WP, Whole pelvis.

experience that radiation therapy after radical surgery bears the risk of increased complications. Those occurring after RT required operative intervention more frequently. There were no treatment deaths reported among these 195 patients. The overall ureteral fistula rate was 3.1% (6/195). In the RT group an analysis of the complications was done to correlate risk with radiation dose (Table 7). All cases received external beam RT without intracavitary brachytherapy. Patients receiving 5500 rad whole pelvis or more accounted for 28% of all cases and 50% of the complications, a suggestion that the expected increase in risk with more intense radiation did occur.

*Comment.* A literature review was undertaken for purposes of comparison and also to see if the already reported data justified the widespread opinion among radiation therapists and gynecologic oncologists that pelvic node metastasis was an established indication for pelvic radiation after radical hysterectomy in women with Stage Ib squamous carcinoma of the cervix. Over 30 articles reporting results of surgery in early cervix cancer were reviewed. Of these, six (only three from the United States) were evaluable as judged by the following criteria: (1) published within the last 10 years; (2) Stage Ib cases only; (3) no preop pelvic (external) radiation; (4) survival rate at 2 to 5 years post-therapy for cases with node metastases; (5) survival reported for cases receiving postoperative adjuvant pelvic RT or no further treatment. The 5-year survival for the RT and no RT series are presented in Tables 8 and 9, respectively. The overall differences are not statistically significant ( $0.1 > p > 0.05$  by the  $\chi^2$  method). Except for the report from

TABLE 8  
LITERATURE REVIEW  
STAGE Ib CERVICAL CARCINOMA POSTOPERATIVE RT

Author	Year	Case with positive no. nodes	5-Year NED (%)
Kelso <sup>(2)</sup>	1973	14	57
Rampone <sup>(3)</sup>	1973	81	63
Masubuchi <sup>(4)</sup>	1969	14	57
Total		109	61.5

TABLE 9  
LITERATURE REVIEW  
STAGE Ib CERVICAL CARCINOMA  
NO POSTOPERATIVE RT

Author	Year	Cases with no. nodes	5-Year NED (%)
Piver <sup>(5)</sup>	1975	39	55.2
Hsu <sup>(6)</sup>	1972	37	40.5
Burch <sup>(7)</sup>	1970	23	56.0
Total		99	50.0

Taiwan [6] the results in the selected literature review are virtually the same as the results reported by this panel. No conclusions can be drawn regarding the efficacy of adjuvant pelvic radiation therapy in this clinical setting either from the literature or the panel data.

#### REFERENCES

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