

MANAGEMENT OF STAGE I CARCINOMA OF ENDOMETRIUM

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SUMMARY

The role of radiotherapy in improving disease free survival (DFS) or overall survival (OS) in patients of stage I carcinoma of endometrium is controversial. We reviewed 168 patients of stage I carcinoma endometrium, some of whom received no adjuvant radiotherapy (n=79) and others received adjuvant radiotherapy (n=89). We found no difference in the DFS (82.3% v/s84.3%) or the OS (89.9% v/s 86.5%) in the two groups respectively. The overall 5 year survival was 88%. We feel that adjuvant radiotherapy should be reserved for a select group of patients who are at a high risk for local recurrence.

INTRODUCTION

Endometrial carcinoma in increasing world wide and in western Europe and USA it is now the most common pelvic malignancy Waterhouse et al (1982). Of late, FIGO staging, based on clinical parameters, has been criticised for its deficiencies and surgical staging with its histological findings has been proposed to replace the clinical one Piver et al (1982).

Routine adjuvant radiotherapy which was being practised to prevent recurrences in the pelvis and vaginal vault is being examined for its validity. The current proposed staging in 1988 by FIGO Announcements (1989) is expected to select the patients for further adjuvant therapy thus avoiding unnecessary additional therapy on a routine basis. There is also a controversy with regards to sampling of pelvic and paraaortic nodes in all cases of carcinoma of endometrium as suggested by 1988 FIGO staging. There is a suggestion to restrict the nodal dis-

section to patients with high-risk factors. With the two controversial points in mind we have reviewed our data of carcinoma of endometrium stage I, who underwent surgery before being taken up for further adjuvant therapy, the nodal sampling being done only in selected cases.

MATERIAL AND METHODS

All cases of carcinoma of endometrium treated with hysterectomy with bilateral salpingo-oophorectomy with or without pelvic node dissection and who were pathologically stage I were included for the study. In all these cases radiotherapy was given for poorly differentiated tumors and myometrial invasion more than inner 1/2. Some cases with involvement of more than 1/2 of myometrium did not receive radiotherapy if the tumour was of grade 1 or 2. Radiotherapy was given in the form of whole-pelvis irradiation with external beam of 50 GY with a boost to vagina so that it receives 65 GY. Following the completion of primary treatment patients were on follow up at 3 months interval for 2 years, at 6 monthly interval thereafter. Patients were

followed up with clinical examination, vaginal smears and ultrasonography of abdomen and pelvis whenever necessary. The survivals were calculated by Kaplan-Meir method from the time of completion of primary treatment.

RESULTS

There are a total of 168 patients of stage I treated during 1981-1989. The overall 5 year survival was 88%. The various modalities of treatment in different sub-stages are given in Table I.

Recurrences & Outcome : (Table II)
The recurrence rate in stage I was 16.6% with 13.1% in stage Ia, 17% in stage Ib, 19.3% in state Ic. In stage Ia out of 5 recurrences 2 had grade 1 tumours and others had grade 3 tumors. The mean interval of recurrence was 26 months. Two patients with vault recurrences were treated with radiotherapy and were alive at 5 and 10 years and 3 died within three months. In stage Ib patients the mean interval of recurrences was 18.3 months. Of the 17, 9 had only BSOH as primary treatment and the others received BSOH and RT.

TABLE I
CARCINOMA ENDOMETRIUM STAGE I: TREATMENT

Treatment	Ia (n=38)	Ib (n=99)	Ic (n=31)
BSOH	18	43	16
BSOH + RT	20	55	14
Radial Hysterectomy	0	1	1

TABLE II
CARCINOMA ENDOMETRIUM STAGE I SITES OF
RECURRENCES & PRIOR THERAPY

Site of Recurrence & Metastases	Ia	Ib	Ic
Total	5/38	17/99	6/31
Vault	3	9	1
Pelvis	1	3	1
Others	1	5	4
Prior therapy			
BSOH	3	9	2
BSOH + RT	2	8	4

TABLE III
CARCINOMA OF ENDOMETRIUM STAGE I
TREATMENT & SURVIVALS

Stage	Treatment	5-year Survival	
		DFS	OS
Ia	BSOH	83.3%	94.4%
	BSOH + RT	90%	90%
Ib	BSOH	79%	93%
	BSOH + RT	85.4%	89%
Ic	BSOH	87.5%	87.5%
	BSOH + RT	71.5%	71.5%
Total	NO RT	82.3%	89.9%
	ADJ. RT	84.3%	86.5%



Fig. 1 The Partial Zona Dissection micro-pipette introduced through the zona of a 6 cell embryo at the 12' o'clock position and exits at 11' o'clock position.

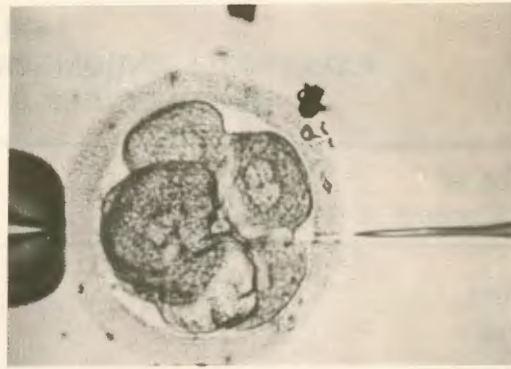


Fig. 2 The zorricon slit created in the zona of a cell embryo by the technique of Assisted Hatching (Partial Zona Dissection).

Histologically 10 had grade 2 tumours and 7 had grade 3 tumours. Vault recurrences were treated with radiotherapy with or without surgery and 6 were alive between 3 and 6 years and 3 died or were lost to follow up within one year. Others (n=8) were treated with combinations of radiotherapy, chemotherapy and hormones. Of these 2 were alive at 2 years and 6 died or were lost to follow up within one year. In state Ic the mean interval of recurrence was 21 months. Two of these had only BSOH and 4 had BSOH and RT. Four of them had grade 2 tumors one each had grade 1 and grade 3 tumors. All were treated with combinations of radiotherapy, chemotherapy and hormones but all died or were lost to follow up within 18 months.

Table III shows the disease free survival (DFS) and the overall survival (OS) according to the treatment allocated. There was no difference in either, with or without

adjuvant radiotherapy.

DISCUSSION

FIGO has suggested an essentially surgico-pathological staging for endometrial carcinoma in 1988 Announcements (1989), to properly delineate the disease and to identify the risk factors to tailor the postoperative adjuvant therapy. As the majority of patients of carcinoma endometrium are constituted by stage I, there is justification in concentrating our efforts on these patients. The 5 year survivals are about 90% for well and moderately differentiated stage I endometrial carcinoma whereas that for poorly differentiated ones are about 70% Grundsell et al (1980). The 5 year survival in our study is 88%. Patients with poorly differentiated adenocarcinoma treated with combined therapy of surgery and radiotherapy had a slightly better survival compared to surgery alone although in most studies the results were not statistically significant Frick et al (1973), Salazar et al (1978), Wharram et al (1976).

Gynecologic Oncology Group has reported approximately 11% incidence of pelvic lymph node metastases and 7-10% para-aortic node metastases in stage I carcinoma endometrium Creasman et al (1987). But there is little evidence of improved survival with addition of pelvic radiation though it improves local control in those with pelvic node metastases Aalders et al (1980).

In this study stage Ic had had the lowest 5-year survival of 66.1% compared to 91.7% in stage Ia. Frick et al have reported 5-year survival of 91.6% with surgery alone and 96.4% with surgery and radiotherapy for when tumour did not invade myometrium and 72.7% and 81.8% with respective therapies when middle 1/3 or more of myometrium was involved.

In a prospective randomised study to evaluate the role of external pelvic radiation therapy, in stage I carcinoma of endometrium it was suggested, that external radiation therapy although decreasing local recurrence, does not benefit survival Onsrud et al (1976). Addition of external beam therapy significantly improved survival in the group with deep myometrial spread compared to those who received only surgery and intravaginal radium source Joslin et al (1977). The same was also observed in this study also.

In endometrial cancer as per the guidelines of FIGO 1988, correct staging requires lymphadenectomy although

this procedure has not been shown to improve survival rates Malkasian et al (1977), Milton & Metters (1972).

So it appears that a proper surgical staging with selective lymphadenectomy only in patients with high risk factors and radiotherapy in postoperative setting in indicated patients can give satisfactory results in stage I carcinoma of endometrium though patients with involvement of outer half myometrium will fare badly with the existing treatment modalities.

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