

Node-Positive Adenocarcinoma of the Endometrium: Outcome and Patterns of Recurrence

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Introduction

Stage IIIC endometrial cancer is an uncommon but challenging clinical problem. Most studies have been small and included patients with tumors of various histologic subtypes. These subtypes have distinctly different prognoses and patterns of recurrence and may require different treatments. We hypothesize that patients whose tumors are of the usual variety (lacking serous or clear-cell differentiation) are more likely to have locoregionally-confined disease and are therefore more likely to benefit from locoregional radiation therapy. To investigate this, we reviewed the outcomes of patients treated at MD Anderson Cancer Center for stage IIIC adenocarcinomas of the endometrium, excluding patients whose tumors had serous or clear cell differentiation.

Methods

Study population:

- 53 women treated for stage IIIC adenocarcinoma of the endometrium at MDACC between 1984 and 2004
- All underwent TAB-BSO and lymph node dissection.
- 35 received adjuvant pelvic ± paraaortic RT
 - 45 Gy was to areas at risk for microscopic disease.
 - Up to 57 Gy to areas of gross disease or high risk.
- 18 patients (all treated between 1984 and 1990) were treated without external beam RT using
 - Platin-based chemotherapy ± brachytherapy (16 pts)
 - Hormones ± brachytherapy (2 pts)
- The median follow-up of patients not dying of disease was 72 months.

Results

Pathologic characteristics:

- 29 (55%) had only pelvic lymph nodes involved, 9 (17%) had paraaortic lymph nodes (PANs) only involved and 16 (30.2%) had both pelvic and PANs involved.
- 29 (55%) had grade 2 cancers; 20 (38%) patients had grade 3, and 2 patients had grade 1 cancers.
- 64% had deep (>50%) myometrial invasion
- 32% had involvement of the cervix.

Results

Salvage:

- Four recurrences were salvaged with re-irradiation. Two of these were patients recurred above the pelvic radiation field in the PANs and two were distal vaginal recurrences.

Complications:

- Two grade 4 small bowel obstructions in patients treated with RT for an overall major complication rate of 5.7%.

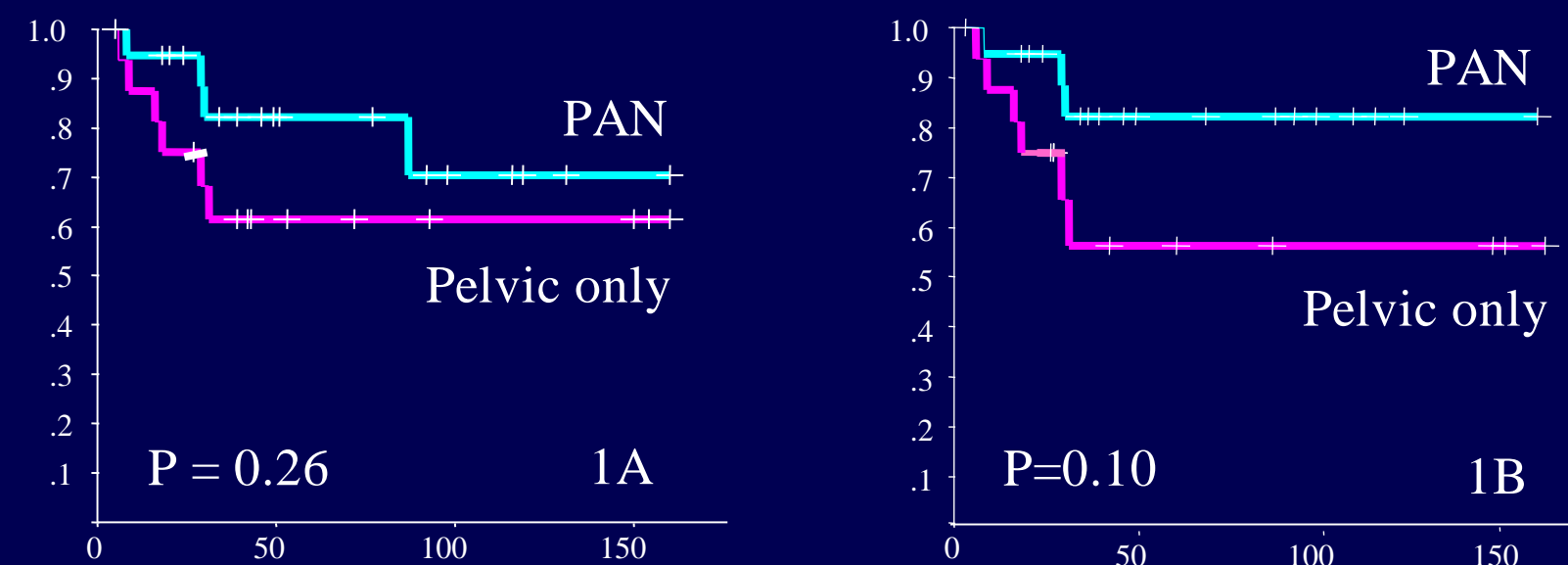


Figure 1 Overall survival (1A) and DSS (1B) in 35 patients treated with adjuvant external beam by highest involved node station. The overall 5-year disease-specific survival (DSS) was 73%. At 5 years, the DSS of patients treated with RT for positive pelvic nodes only was 60% vs. 82% for those with PANs ($P = 0.10$).

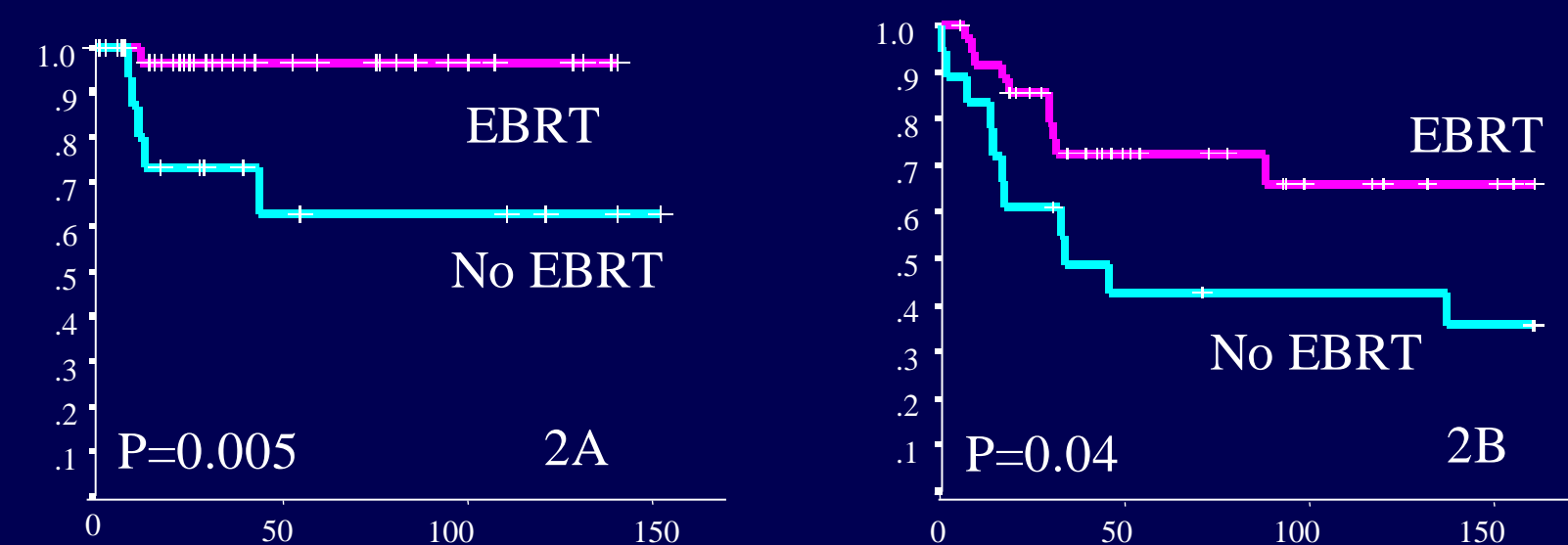


Figure 2 Pelvic relapse-free survival (2A) and overall survival (2B) in 53 patients treated with and without adjuvant external beam. Overall survival was superior in patients receiving external beam radiation; 42% vs 75% at 5 years ($p=0.04$) as was pelvic relapse-free survival; 97% vs. 60% ($p=0.005$).

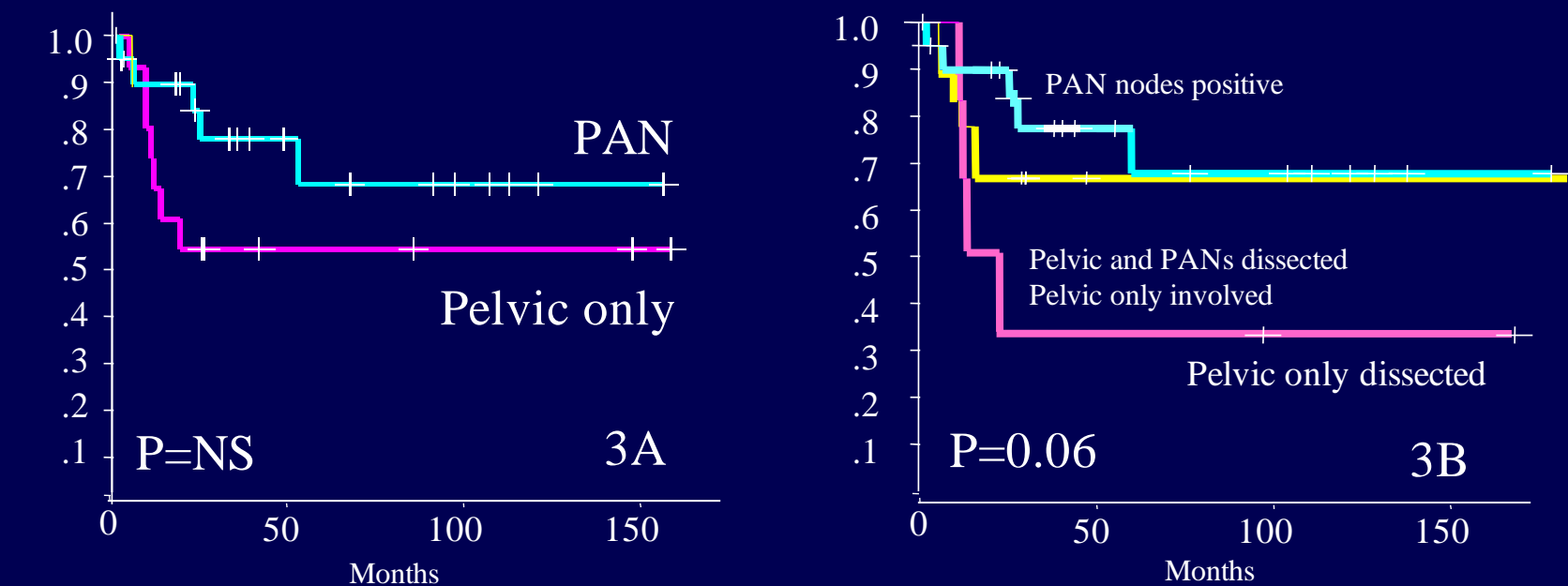


Figure 3 Impact of nodal dissection on relapse-free survival in 35 patients treated with external beam radiation. No significant difference in relapse-free survival is seen in patients with PAN or pelvic nodes only (Figure 3A). Patients with limited dissection including only pelvic lymph nodes had a relapse-free survival of 32% as compared to 67% for patients with dissection of PANs (3B).

	Distal vagina	Vaginal cuff	Pelvic	PANs	Mediastinum	SCV	Other distant	Total
XRT Pelvic only	6.7% (1/15)	0% (0/15)	6.7% (1/15*)	13.3% (2/15)	6.7% (1/15)	0% (0/15)	0% (0/15)	33% (5/15)
XRT Pelvic and PAN	10% (2/20)	0% (0/20)	0% (0/20)	0% (0/20)	0% (0/20)	15% (3/20)	15% (3/20)	35% (7/20)
No XRT	11.1% (2/19)	5.6% (1/19)	27.8% (5/19)	11.1% (2/19)	0% (0/19)	0% (0/19)	5.6% (1/19)	55.6% (10/19)

* Only in-field failure occurred in patient with gross residual disease at site of recurrence.

Table 1. Patterns of failure according to radiation treatment field. The primary site of relapse for patients that did not receive radiation was in the pelvis. The most common site of relapse was PANs for patients receiving pelvic irradiation alone and supraclavicular nodes or distant metastasis for patients receiving pelvic and PAN radiation.

Conclusions

- Treatment with lymph node dissection and postoperative RT achieved a high rate of cure in patients with stage IIIC adenocarcinoma of the endometrium.
- Locoregional failures were common in patients who did not receive RT.
- In this retrospective analysis, treatment with external beam radiation improved clinical outcome.