

Frequency and Characteristics of Isolated Para-aortic Lymph Node Recurrence in Patients with Uterine Cervical Carcinoma in Japan: A Multi-Institutional Study

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Abstract

Objective: In most cases of uterine cervical carcinoma recurrence, the first site of distant metastasis or recurrence is reported to be the para-aortic region. Some reports have demonstrated that in cases of isolated para-aortic lymph node recurrence treated by radiation therapy, patients survived for a long period, which suggests that isolated para-aortic lymph node recurrence in uterine cervical carcinoma is regional disease rather than systemic disease. Determining the predictive characteristics of isolated para-aortic recurrence in patients at the time of the initial treatment for primary uterine cervical carcinoma is important, so we conducted the current multi-institutional study.

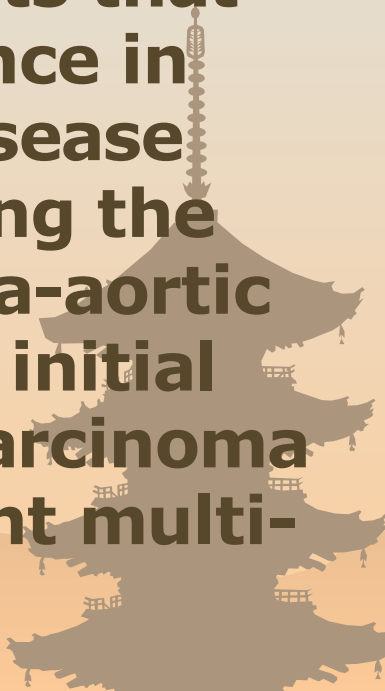
Patients and Methods: Patients (n=3,137) with uterine cervical carcinoma of stages Ia to IVa were treated in twelve Japanese hospitals between 1994 and 2003. The current study investigated the frequency and characteristics of patients with isolated para-aortic recurrence as well as the characteristics of clinical stage, histopathology, serum squamous cell carcinoma antigen level, the treatment method at the initial treatment, the duration between the initial treatment and the recurrence, and the serum squamous cell carcinoma antigen level at the recurrence.

Results: Of the 3137 patients with uterine cervical carcinoma in stages Ia-IVa, 67 (2.1%) experienced recurrence in isolated para-aortic lymph nodes. Stratified by clinical stage, none of the 613 patients with stage Ia experienced recurrence in isolated para-aortic lymph nodes. However, recurrence was experienced by 14 (1.4%) of the 966 patients with stage Ib, 7 (3.5%) of the 199 patients with stage IIa, 14 (2.3%) of the 613 patients with stage IIb, 1 (2.1%) of the 48 patients with stage IIIa, 26 (4.6%) of the 538 patients with stage IIIb, and 5 (5%) of the 100 patients with stage IVa. The mean duration time between the initial treatment and isolated para-aortic recurrence was 20 months (range, 2- 49 months). The correlations between duration time and the clinico-pathological factors (clinical stage, histopathology, serum squamous cell carcinoma antigen level, and treatment method) at the initial treatment was investigated. No statistically significant factors have been revealed in the current study.

Conclusions: The frequency of isolated para-aortic lymph node recurrence was 2.1% and increased with increasing clinical stage at the initial treatment (stage IVa: 5%) in the current study.

Background & Purpose

In most cases of uterine cervical carcinoma recurrence, the first site of distant metastasis or recurrence is reported to be the para-aortic region. Some reports have demonstrated that in cases of isolated para-aortic lymph node recurrence treated by radiation therapy, patients survived for a long period, which suggests that isolated para-aortic lymph node recurrence in uterine cervical carcinoma is regional disease rather than systemic disease. Determining the predictive characteristics of isolated para-aortic recurrence in patients at the time of the initial treatment for primary uterine cervical carcinoma is important, so we conducted the current multi-institutional study.



The frequency of isolated para-aortic lymph node recurrence

Clinical Stage	The frequency of isolated para-aortic lymph node recurrence	
Ia	0 / 613	(0 %)
Ib	14 / 966	(1.4%)
IIa	7/199	(3.5%)
IIb	14/613	(2.3%)
IIIa	1/48	(2.1 %)
IIIb	26/538	(4.6 %)
IVa	5/100	(5 %)
Ia – IVa	67/3137	(2.1 %)

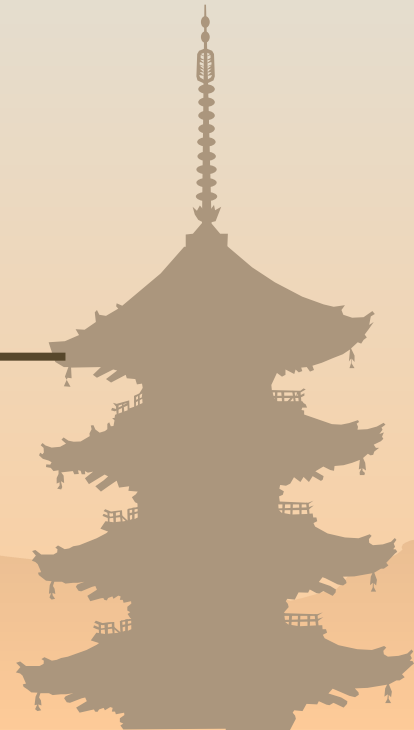
Patients Characteristics of Isolated Pra-aortic Lymph Node Recurrence

The mean age years)	55.7 years (range; 25 – 86
Histopathology	
Squaqumous cell carcienoma	56
Adenocarcinoma	5
Adenosquamous cell carcinoma	5
unclassified	1
Initial Treatment	
Radiation therapy alone	32
Chermo-radiation therapy	12
Surgery followed by radiaton threapy	20
Surgery alone	3
The mean serum SCC Level	
initial treatemtn	17.3 ng/dl (range; 0.5 –
100 ng/dl)	
recurrence	9.5 ng/dl (range; 0 –
120 ng/dl)	
The mean DT*	20 months (range; 2 – 49
months)	

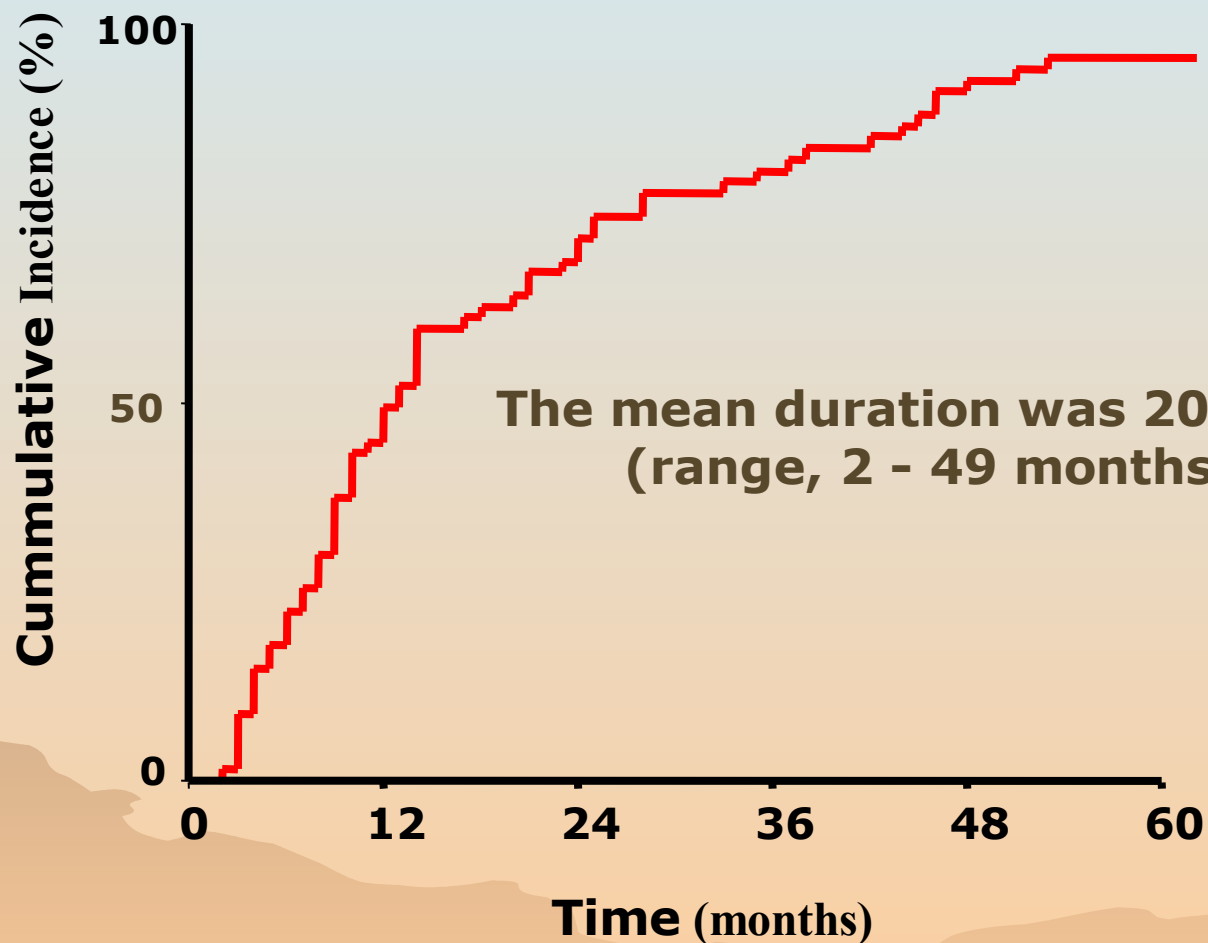
*The mean DT: The mean duration time between the initial treatment and isolated para-aortic recurrence

Symptom at the isolated para-aortic recurrence

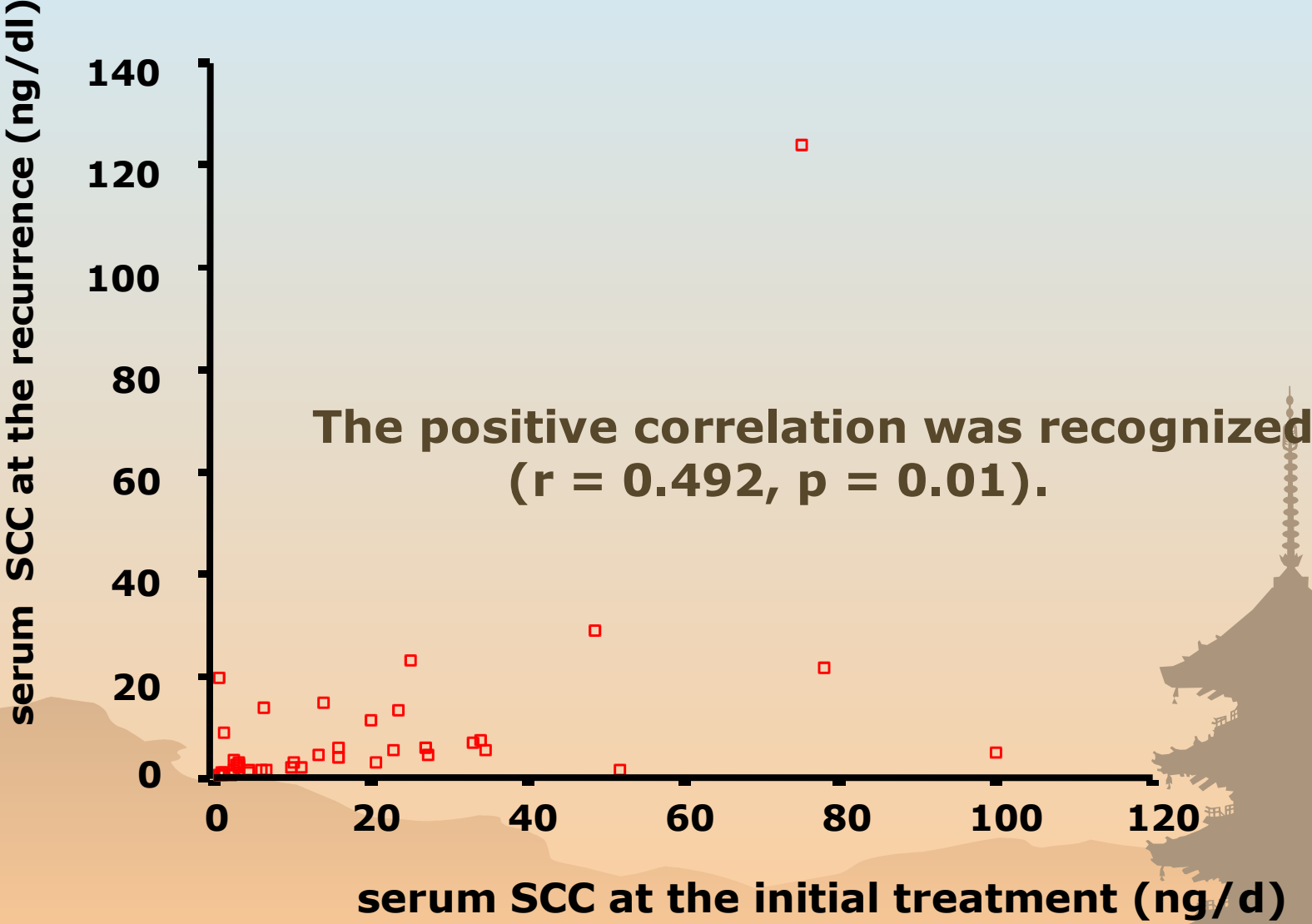
Symptom	the number of patients
Lumbago	14
Edema of lower extremities	3
Pain of lower extremities	3



The cumulative mean duration time between the initial treatment and isolated para-aortic lymph node recurrence



The correlation between serum SCC antigen level at the start of the initial treatment and serum SCC antigen level at the isolated para-aortic lymph node recurrence



Conclusions

The frequency of isolated para-aortic lymph node recurrence was 2.1% and increased with increasing clinical stage at the initial treatment (stage IVa: 5%) in the current study.



Acknowledgements

Japanese Isolated Para-aortic Lymph Node of UCC Study Group

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