
GYNAECOLOGY

Adjuvant Chemotherapy for Stage I Uterine Sarcoma

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ABSTRACT

- Objective** To ascertain the long term outcome for women with stage I uterine sarcoma.
- Design** A retrospective analysis of case records.
- Setting** Department of Obstetrics and Gynaecology, Faculty of Medicine, Siriraj Hospital.
- Subjects** Sixteen women with stage I uterine sarcoma admitted for treatment between January 1982 and December 1987.
- Results** All of the patients after receiving complete surgery were given adjuvant treatment either chemotherapy or radiation. A follow up period of 60-110 months after surgery was done in all cases. Four cases who received adjuvant radiation therapy all developed recurrence within 18 months after radiation therapy. Another 12 cases were given combined chemotherapeutic drugs of Cisplatin, Adriamycin and Cyclophosphamide, 11 out of 12 cases are alive with no evidence of disease at present while only one patient developed recurrence at 28 months.
- Conclusion** The study supports that adjuvant chemotherapy could decrease recurrent rate and prolong survival time in this group of patients.

The uterine sarcoma is a malignant tumour arising from either the myometrium or endometrium. From the clinical point of view, it is classified into three major groups, namely leiomyosarcoma, stromal sarcoma, and mixed mesodermal sarcoma. This classification has

advantages since it includes almost all uterine sarcoma and avoids the cumbersome. It is a relatively rare tumour of mesodermal origin, encountered in only 2 to 6% of uterine malignancies.^(1,2) The management is still controversial because of the rarity of the disease

which hinders prospective studies. Because of a high recurrence rate following surgical treatment in the early stages of the disease, various combinations of adjuvant therapy have been given. Reported herewith a retrospective study of 16 patients with leiomyosarcoma, treated with adjuvant therapy to disclose the role of such treatment on the rate of recurrence particularly in stage I uterine sarcoma.

Materials and Methods

The patients with uterine leiomyosarcoma admitted to the Department of Obstetrics and Gynaecology, Siriraj Hospital from January 1982 to December 1987 were studied. Those with tumour lesions extended beyond the uterine corpus were excluded from this study. The patients were classified employing the Modified Uterine Sarcoma Nomenclature adopted by the Gynecologic Oncology group.⁽³⁾ All patients, were evaluated following completion of adjuvant treatment and were histologically confirmed to have uterine leiomyosarcoma with the mitotic index of more than 10 in addition the vascular space invasion. After surgical treatment (Total abdominal hysterectomy with bilateral salpingo-oophorectomy) patients were given the adjuvant treatment. The postoperative chemotherapy was a combination of Cisplatin (50 mg/m²), Adriamycin (50 mg/m²) and Cyclophosphamide (400 mg/m²). This was repeated every four weeks for six courses. Those who refused chemotherapy were treated with a 5 week course post-operative radiation of 5,000 rads to the whole pelvis.

After completion of treatment, all patients were followed at 2-monthly intervals during the first year, 3-monthly during the second year and every 6 months in the following years. Complete physical and pelvic examinations were performed

at each visit, while chest x-ray examination was carried out every six months.

Results

During the study period, there were 16 patients encountered with stage I leiomyosarcoma. Only 12 patients were allocated to receive adjuvant chemotherapy while four other patients were treated with postoperative radiotherapy.

The follow up period of these patients ranged from 61 to 110 months. Only one patient was found to have recurrent disease 28 months after completion of treatment, as shown in Table 1. The rest of the patients are alive and free of disease.

Four cases also received adjuvant radiation therapy, all developed recurrence within 18 months after radiation therapy.

Discussion

Nowadays there is an increased interest in the role of adjuvant chemotherapy in localized uterine sarcoma as well as metastatic tumour. Since there is not only a relatively low survival rate after surgery in patients with localized uterine sarcoma, and subsequently local recurrence, but also occasionally there is distant metastasis. Adjuvant treatment is therefore believed to be beneficial. Despite adjuvant radiotherapy also being given to patients with this disease, the results are disappointing.^(4,5)

Chen reported a high frequency of nodal spread in a stage I uterine sarcoma and it was suggested that lymphatic dissemination might precede haematogenous spread in early stage of the disease.⁽⁶⁾ The increased success rate of adjuvant chemotherapy in this study resulted from two reasons. Firstly, the treatment was given postoperatively to those with only mic-

Table 1. Leiomyosarcoma treated with postoperative chemotherapy

No	Age (years)	MI/10 HPF	Survival (months)
1	49	22	95
2	45	19	28*
3	48	16	110
4	38	22	70
5	47	14	101
6	47	25	71
7	50	18	78
8	51	20	98
9	56	14	68
10	46	20	75
11	46	24	89
12	48	22	61

* Recurrence at 28 months after complete treatment.

MI = mitotic activity

HPF = high power field

roscopic residual disease, thereby greater sensitivity to the drug therapy was achieved, unlike the lesser response rate in the late stage of the disease. Secondly, the combination of Adriamycin and Cisplatin treatment achieved the synergistic effect of a high response rate in this study while single drug response rates from Adriamycin and Cisplatin were only 25 % and 5 % respectively.^(7,8) This study demonstrates that adjuvant chemotherapy could eliminate the microscopic residual tumour after surgical treatment, resulting in increased survival rate in patients with early stage of the uterine sarcoma. Although small number of patients were included in our preliminary data, the result showed a significant beneficial effect of adjuvant chemotherapy in stage I leiomyosarcoma. Further study in a larger series of patients should be carried out in order to disclose the

appropriate regimen

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