

# Gynecology Division

## Introduction

The Gynecologic Oncology Division deals with tumors originating from the female genital and reproductive organs. Surgery is the main treatment modality for most gynecologic cancers, but multi-disciplinary treatments consisting of radiotherapy and chemotherapy are routinely carried out in close cooperation with therapeutic radiation oncologists and medical oncologists.

The incidences of three common gynecologic cancers, cervical, endometrial and ovarian cancer, are now on the rise in Japan. In our institution, the numbers of endometrial and ovarian cancer patients have increased about four-fold during the past thirty years. The number of patients with invasive carcinoma of the cervix had decreased by half in that same period, but the trend has reversed since the late-1990s. Consequently invasive cervical cancer is still the most common gynecologic cancer in Japan.

## Routine Activities

Four gynecologic oncologists belong to the Gynecology Division as staff members. In addition, there are two residents under training in our division. Current topics in the diagnosis and treatment of gynecologic malignancies are periodically discussed after the Monday general meeting. All cases under treatment are presented at the joint conference every Wednesday. A clinicopathological conference is held monthly on second Tuesday.

### 1) Treatment strategy for uterine cervical cancer

Either conization or simple total hysterectomy is the treatment of choice for persistent high grade dysplasia, Stage 0 or Ia1 cervical cancer. Patients with stages Ia2 to IIIa usually undergo radical hysterectomy and pelvic lymphadenectomy. Postoperative total pelvic irradiation following radical hysterectomy is only considered in patients with

metastasis to pelvic nodes or parametrial tissue confirmed by pathological examination. Radiotherapy is given to patients with stage IIIb and IV, or poor risk patients at any stage. Chemotherapy is sometimes employed for the treatment of distant metastasis. Concurrent chemo-radiotherapy became a routine method for bulky stage tumors.

### 2) Treatment strategy for endometrial cancer

The primary treatment choice is hysterectomy with bilateral salpingo-oophorectomy. Pelvic lymph node dissection is also performed for patients with high risk of metastasis. Para-aortic node dissection is only performed, if there is a biopsy proven nodal metastasis. Positive peritoneal cytology is not a poor prognostic factor for patients with a well-differentiated tumor. Postoperative total pelvic irradiation is performed for patients with metastasis to pelvic node. For patients with distant metastasis, chemotherapy is added to the treatment regimen.

### 3) Treatment strategy for ovarian cancer

A simple total hysterectomy, bilateral salpingo-oophorectomy and omentectomy with or without combined resection of the involved intestine are the standard procedure for the treatment of ovarian cancer. For patients who have not peritoneal dissemination, pelvic and para-aortic lymph node dissection is indicated if the metastasis has been confirmed by frozen section. For patients with advanced stage, surgery is followed by combination chemotherapy containing Carboplatin and either Paclitaxel or Docetaxel. Patients with more advanced stage III and IV disease that are unlikely to be optimally debulked, are treated with primary chemotherapy. After four courses of chemotherapy, an initial surgery is usually performed for these patients. Surgery alone can offer the chance of cure for cases of recurrence, if the disease is completely resectable.

## Research Activities

To identify the prognostic significance of positive peritoneal cytology in endometrial carcinoma, Kasamatsu et al analysed 280 patients with endometrial carcinoma limited to the uterus. We concluded that the presence of positive peritoneal cytology is not a prognostic factor in patients with endometrial cancer confined to the uterus, and adjuvant therapy does not appear to be beneficial in these patients. Sawada et al examined immunohistochemically the incidence and distribution of KIT, EGFR, and HER-2 oncoproteins in 16 surgically resected specimen of uterine carcinosarcoma. The research revealed that the expression patterns of KIT, EGFR, and HER-2 differed between the epithelial and mesenchymal components, and the regulation of their expression appeared important in the acquisition of mesenchymal metaplasia in uterine carcinosarcoma.

## Clinical Trials

A randomized controlled trial of a neoadjuvant chemotherapy for advanced cervical cancer (stage Ib2 or stage II having a large tumor with one dimension over 4 cm) was started in 2001 and is now ongoing, by the study group supported by the Ministry of Health, Labor and Welfare (JACOG102). A preliminary study of randomized controlled trial of a neoadjuvant chemotherapy for advanced epithelial ovarian cancer (stage IIIc or IV) was started in 2003, and is now ongoing (JACOG 0206MF). A phase I/II study of Heavy Ion Radiotherapy for advanced cervical adenocarcinoma using the Heavy Ion Medical Accelerator in Chiba (HIMAC) that was developed by the National Institute of Radiological Science (NIRS) was instituted in 1997 and is now ongoing.

● R. Tsunematsu ●

	2002	2003
Cervical cancer	75	115
Corpus cancer	77	80
Ovarian cancer	52	63
Vulvar cancer	6	3
Vaginal cancer	2	3
Other cancer	5	8
CIN	41	18
Total	258	290

Treatment	2002	2003
Surgery	233	260
Chemotherapy	130	130
Radiotherapy	76	70

Stage	Cervical cancer		Ovarian cancer		Corpus cancer	
	No. of Pt	5-yr Survival	No. of Pt	5-yr Survival	No. of Pt	5-yr Survival
I	412	88%	80	86%	338	89%
II	162	72%	20	81%	67	87%
III	105	51%	131	32%	94	74%
IV	33	24%	73	16%	16	28%
Total	712	76%	304	46%	515	84%