

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 multidisciplinary 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

Five gynecologic oncologists belong to the Gynecology Division as staff members. In addition, there are four 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 2nd 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 Paclitaxel. 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

Onda et al. reported a phase I trial of combination chemotherapy with Cisplatin, Paclitaxel and Doxorubicin (TAP) for advanced ovarian cancer. Recommended doses were Paclitaxel 110 mg/m² over 24hrs on day 1, Cisplatin 75 mg/m² on day 2 and Doxorubicin 50 mg/m² on day 1. Grade 4 leukopenia was occurred in 44% at this dose level. Clinical response was observed in 16 of 19 evaluable patients. The combination of TAP is well tolerated as first line chemotherapy in AOC. Sawada et. al. reported an assessment of the lotus petal flap in the vulvoperineal reconstruction among 5 patients treated for vulva cancer. It is thought that the lotus petal flap is one of the most ideal reconstructive procedures for vulvoperineal region.

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 (JCOG102). A preliminary study for randomized controlled trial of a neoadjuvant chemotherapy in advanced ovarian cancer (stage IIIc or IV) was closed in 2004 (JCOG 0206MF). A phase III trial comparing primary chemotherapy and laparotomy followed by chemotherapy in advanced ovarian cancer is to be started in 2005. 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 ●

	Number of patients
Cervical cancer	100
Corpus cancer	81
Ovarian cancer	30
Total	211

patients with preinvasive disease were excluded

Type of procedure	Number
Radical hysterectomy	49
Simple hysterectomy and nodal dissection	21
Simple hysterectomy and omentectomy	30
Simple hysterectomy	101
Pelvic exenteration	1

Operative morbidity and mortality	Percentage
Major complications	6%
Minor complications	13%
Operative death within 30 days	0
Postoperative hospital death	0

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

Stage: FIGO staging of gynecologic cancers
Op. year: 1990-1999