

Chapter 3 ■ Stage Ia disease

Overview

A lesion is at stage Ia if the depth of stromal invasion is ≤ 5 mm and the longitudinal spread is ≤ 7 mm. A lesion is at stage Ia1 if the depth of invasion is < 3 mm, and lesions beyond this measurement are at stage Ia2. The stages are unchanged even if there is venous or lymphatic infiltration or local invasion. The International Federation of Gynecology and Obstetrics (FIGO) clinical staging (1993) also classifies adenocarcinoma into stages Ia1 and Ia2. However, the “Guidelines for the Clinical and Pathological Study of Cervical Cancer in Japan,” (1997) state that stage Ia adenocarcinoma is confined to the region of the normal intracervical glands with microinvasion. Histological classification is not performed. The diagnosis of stage Ia is made by cervical cone biopsy. In this chapter, we cover squamous cell carcinoma. Refer to Chapter 8 for adenocarcinoma.

Stage Ia accounts for 11% of cervical cancers, and 92% of stage Ia lesions are stage Ia1. There are relatively more younger patients with stage Ia disease than those with \geq stage Ib, with 8% of stage Ia patients 20-29 years old, and 40% 30-39.¹

In determining the appropriate treatment for stage Ia disease, each individual patient should be considered in terms of the following: stage Ia1 vs Ia2, vascular or lymphatic infiltration and local invasion, residual lesions in the resection margins of cervical cone biopsy specimens, and the patient’s desire for fertility preservation. The various options include cervical cone biopsy, total hysterectomy, modified hysterectomy (\pm lymphadenectomy), and radical hysterectomy. The risk of lymph node metastasis is high in patients with vascular or lymphatic infiltration or local invasion. In these cases, hysterectomy with lymphadenectomy is sometimes performed. There is only limited evidence on the optimal surgical method for hysterectomy. For reference, Tables 3-1 and 3-2 show recent treatments and number of cases for stages Ia1 and Ia2 disease in Japan.¹

Table 3-1 Treatments for stage Ia1 cervical cancer in 2003

Treatment	Number of cases	%
Cone biopsy		
Total hysterectomy		
Total hysterectomy + lymphadenectomy		
Modified hysterectomy		
Modified hysterectomy + lymphadenectomy		
Radical hysterectomy		
Radiotherapy		
Other		
Total		

(Jan 1-Dec 31 2003; 247 institutions)

Table 3-2 Treatments for stage Ia2 cervical cancer in 2003

Treatment	Number of cases	%
Cone biopsy		
Total hysterectomy		
Total hysterectomy + lymphadenectomy		
Modified hysterectomy		
Modified hysterectomy + lymphadenectomy		
Radical hysterectomy		
Radiotherapy		
Others		
Total		

(Jan 1-Dec 31, 2003; 247 institutions)

References

(1) Gynecologic Oncology Committee Report: 2003 Annual Report of Cervical Cancer Patients, Japan Society of Obstetrics and Gynecology. *Acta Obstetrica et Gynaecologica Japonica* 2005; 57:1711-27. (Level IV) (in Japanese)

CQ03**What treatments are recommended for stage Ia1 disease?**

Recommendations

- (1) Total hysterectomy without pelvic lymphadenectomy is recommended for patients with no evidence of vascular infiltration, lymphatic infiltration, or local invasion (Grade B).
 - (2) Modified hysterectomy and pelvic lymphadenectomy are sometimes performed for patients with vascular infiltration, lymphatic infiltration, or local invasion (Grade C).
 - (3) For patients who strongly desire fertility preservation, the uterus can be preserved by performing cervical cone biopsy alone in patients with: no vascular or lymphatic infiltration, no local invasion, negative resection margins, and negative histological results from endocervical curettage (Grade B).
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Background and Objectives

We examined the optimal surgical procedures for stage Ia1 disease.

Explanations

Total hysterectomy is recommended for stage Ia1 disease in the National Comprehensive Cancer Network (NCCN) cervical cancer guidelines.¹ In Japan, modified radical hysterectomy has been conventionally performed for stage Ia in the former classification.^{2,3} Recently, Many Japanese experts have expressed their opinions that total hysterectomy is sufficient (see the overview of this chapter).^{4,5}

The frequency of lymph node metastasis in stage Ia1 disease is low at 0-1.4%. However, metastasis to the pelvic lymph nodes can occur in patients with vascular or lymphatic infiltration or local invasion. In these cases, modified hysterectomy with pelvic lymphadenectomy is sometimes performed. The frequency of vascular or lymphatic infiltration is reported as 0.2-3.1% for stage Ia1, and the frequency of local invasion as 0-11%.⁶

Cervical cone biopsy can be performed for patients who strongly desire fertility preservation and for patients for whom hysterectomy poses an unacceptable risk. Fertility preservation is possible if the resection margins are negative, and there is no vascular or lymphatic infiltration or local invasion.^{1,7}

【References】

- (2) Guidelines for Clinical and Pathological Management of Uterine Body Cancer (revised, 2nd ed.) Japan Society of Obstetrics and Gynecology, Japanese Society of Pathology, and Japan Radiological Society, editors. Tokyo: Kanehara & Co. October 1997:14-5 (guidelines) (in Japanese)
- (3) Uterine Cancer Registration Committee Report. Acta Obstetrica et Gynaecologica Japonica 1978; 30:1755-6 (level IV) (in Japanese)

(4) Gynecologic Oncology Committee Report: 2003 Annual Report of Uterine Cervical Cancer Patients, Japan Society of Obstetrics and Gynecology. *Acta Obstetrica et Gynaecologica Japonica* 2005; 57:1711-27. (Level IV) (in Japanese)

(6) Kubushiro K, Iwata T, Tsukazaki K, Takanozawa S. FIGO classification Ia and its management. *Obstetrical and Gynecological Therapy* 2001; 82:169-74 (Level III) (in Japanese)

(7) Ueki M, Okamoto Y, Ueda M, Ueki K, Orino I, Kasamatsu G. Preserving therapy for early cervical cancer: consideration of therapeutic limitations. *Obstetrical and Gynecological Practice* 1997;46:855-61. (Level III) (in Japanese)

CQ04**What treatments are recommended for stage Ia2 disease?****Recommendation**

Modified radical hysterectomy, or a more extensive procedure with lymphadenectomy, is recommended for stage Ia2 disease (Grade C).

Background and Objectives

Stage Ia2 disease account for only 8% of stage Ia patients. We examined the optimal surgical procedures for stage Ia2 disease.

Explanations

Radical hysterectomy is recommended for stage Ia2 disease in the National Comprehensive Cancer Network (NCCN) cervical cancer guidelines.¹ The frequency of metastasis to the pelvic lymph nodes is 0-10% for stage Ia2 disease. The frequency of vascular or lymphatic infiltration is 2-22%, and the frequency of local invasion is 0-36%. These frequencies are higher than those for stage Ia1 disease.² Patients with deeper stromal invasion are more likely to have vascular or lymphatic infiltration, and have a higher frequency of lymph node metastasis. Therefore, as a minimum pelvic lymphadenectomy should be performed in stage Ia2 patients, and modified hysterectomy is preferable.³ Since the risk of parametrial invasion is considered low, some reports have stated that resection of the cardinal ligament is unnecessary.^{4,5} Many reports have suggested that modified hysterectomy and pelvic lymphadenectomy are sufficient if no vascular or lymphatic infiltration is present.^{6,7}

Some reports on cytoreductive surgery have indicated that cervical cone biopsy may be sufficient, depending on the extent of stromal invasion and the histopathological findings.^{8,9} However, a consensus has not been reached on the safety of this approach.

Other treatment options include definitive radiotherapy¹ and radical trachelectomy (cervicectomy) with pelvic lymphadenectomy.^{4,6,10}

【References】

- (2) Kubushiro K, Iwata T, Tsukazaki K, Takanozawa S. FIGO classification Ia and its management. *Obstetrical and Gynecological Therapy* 2001; 82:169-74 (Level III) (in Japanese)
- (7) Takeshima N, Yano K, Hirai Y, Hasumi K. Clinical management of stage Ia cervical cancer (new guidelines): new management of FIGO stage Ia cervical squamous cell carcinoma. *Obstet Gynecol* 1998; 53:1160-5 (Level III) (in Japanese)
- (8) Ueki M, Okamoto Y, Ueda M, Ueki K, Orino I, Kasamatsu G. Preserving therapy for early cervical cancer: consideration of therapeutic limitations. *Obstetrical and Gynecological Practice* 1997;46:855-61. (Level III) (in Japanese)

CQ05**What treatments are recommended if disease up-staged to stage Ib (or more advanced) is detected following total hysterectomy?**

Recommendation

Adjuvant radiotherapy is recommended (Grade C).

Background and Objectives

Patients may undergo surgery with a preoperative diagnosis of stage Ia or less, and then be diagnosed with cancer at stage Ib or more advanced following surgery. We examined additional treatment for these patients.

Explanations

Patients may undergo a total hysterectomy with a preoperative diagnosis of carcinoma in situ, stage Ia1, or benign disease. If cancer at stage Ia2 or Ib is found in the excised uterus, then the stage is determined to be Ia2 and Ib, respectively. If cancer at stage Ib (or more advanced) is found in the excised uterus, additional treatment is required in the form of radiotherapy, concurrent chemo radiotherapy, and surgery. A multicenter study in Japan examined the efficacy of these treatments, showing a favorable cumulative 5 year survival rate at 96%. In this study, 36 of 45 patients given additional treatment underwent radiotherapy. This report suggested that lymphadenectomy should also be performed if patients underwent surgery instead of radiotherapy as additional treatment.¹ Another study advocated radical parametrectomy with pelvic lymphadenectomy.²

【References】

(1) Ishikawa H, Fujiwara K, Kono I, Mikami Y, Shinozuka N, Makino T, et al. Clinical pathological study of so-called “cervical cancer IbOCC cases” (multicenter study). Journal of the Japan Society of Gynecologic Oncology 2002;20:437-41. (Level III) (in Japanese)