Editorial

International Federation of Gynecology and Obstetrics (FIGO) staging system revised: what should be considered critically for gynecologic cancer?

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The International Federation of Gynecology and Obstetrics (FIGO), the first organization to develop a staging system of gynecologic cancer, became the official patron of the Annual Report for the development and changes of gynecologic cancer classification and staging since 1958.1 Thereafter, FIGO staging system has been structured to represent major prognostic factors in predicting patients' outcomes and lending order to the complex dynamic behavior of gynecologic cancers. The purpose of the FIGO staging system is to offer a classification of the extent of gynecologic cancer in order to provide a method of conveying one's clinical experience to others for the comparison of treatment methods without ambiguity. To achieve this objective, FIGO staging systems have been updated several times according to the latest available data over the past decades, thus implying that the FIGO staging system is responsive and adaptive to scientific development. Recently, the revised FIGO staging system for carcinoma of the vulva, cervix, endometrium, and uterine sarcomas was approved by the members of FIGO Executive Board in early September 2008. ^{2,3} Thus, we must become accustomed to the new staging system, and apply it in future clinical settings from now on.

For revising the FIGO staging system for carcinoma of the cervix, the 2 major issues, surgical staging and lymph node involvement, have been considered because clinical staging is less accurate than surgical staging, despite significant advances in imaging techniques. Also, lymph node involvement is known to be a poor prognostic factor regardless of the disease extent. The FIGO Committee on Gynecologic Oncology decided that clinical staging should be continued, while lymph nodal assessment during staging is not necessary be-

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cause surgical staging cannot be employed worldwide, especially in low-resource countries. Thus, the above two changes have been approved in the new staging system as follows. First, the subdivision of the tumor size (with a 4 cm cut-off in maximum diameter) has been applied for previous stage IIA, while the subdivision regarding the tumor size, and uni- or bilateral parametrial invasion has not been considered in previous stages IIB-IIIB, because of few available data and identity of treatment. Second, the previous stage 0 has been deleted from the new clinical staging system because it is a pre-invasive lesion.⁴

In the revised FIGO staging system for carcinoma of the endometrium, there are 4 major changes, which are as follows. First, the previous stages IA and IB have been combined as stage IA because there was no significant difference in a 5-year survival among previous stage IA G1, IB G1, IA G2 and IB G2, as stated in volumes 23 to 26 of the FIGO annual report. Moreover, stage IB is now equal to or greater than the outer one-half of the myometrium. Second, stage II no longer has a subset A and B, and involvement of the endocervical gland of the cervix is now considered stage I. Third, pelvic and paraaortic lymph node involvement in previous stage IIIC has been separated because many previous studies have suggested that the prognosis may be worse if para-aortic lymph nodes are involved. Thus, the previous stage IIIC is now categorized as IIIC1 (indicating positive pelvic lymph nodes) and IIIC2 (indicating positive para-aortic lymph nodes with or without positive pelvic lymph nodes). Fourth, positive cytology has been excluded as factors for defining the new surgical staging.5

Among the revised FIGO staging systems for gynecologic cancers, the greatest change is in the new staging system for carcinoma of the vulva. Although the previous stage IA remains unchanged because this is the only group of patients with a negligible risk of lymph node metastasis, the previous stages I and II have been combined because many studies have demonstrated that the size of the lesion with negative lymph nodes is no longer a prognostic factor in previous stages I and

II. Moreover, the number and morphology (size and extracapsular spread) of positive lymph nodes have been taken into account because they have been shown to be important prognostic factors, whereas the bilaterality of positive nodes have been discounted due to controversy from previous studies. ⁶

After the establishment of the 1988 FIGO criteria for carcinoma of the corpus uteri, uterine sarcomas including leiomyosarcoma, endometrial stromal sarcoma (ESS), adenosarcoma and carcinosarcoma, were classified according to the FIGO criteria for carcinoma of the corpus uteri because of their relative rarity. However, this old classification is no longer sufficient because more information on uterine sarcomas has become available and this justified the independent staging. Thus, The FIGO Committee on Gynecologic Oncology approved the new staging system for uterine sarcomas in early September 2008. The revised staging system for uterine sarcomas includes 3 new classifications such as staging for leiomyosarcoma, staging for ESS and adenosarcoma, and staging for carcinosarcoma. Although leiomyosarcoma, ESS, and adenosarcoma are newly classified in this revised staging system, carcinosarcoma is still staged identically to carcinoma of the endometrium.³

However, some types of gynecologic cancers such as ovarian, and fallopian tubal cancers have not been revised for the staging system, albeit recent scientific advances, ⁷ and the revised FIGO staging system for gynecologic cancer reflects major issues insufficiently, which include residual tumor status, different patterns of tumor spread to lymph node, blood and bone, classification of findings in sentinel node biopsies, and

molecular markers as prognostic factors.

A better FIGO staging system should have 3 basic characteristics such as "validity," "reliability" and "practicality." ¹ In other words, this staging system should be flexible and adaptable to significant scientific changes for "validity," ensure that identical cases are assigned to the same stage category without ambiguity for "reliability," and be user-friendly and suitable for use in different clinical environment for "practicality." Thus, future efforts to revise the FIGO staging system should be made to classify disease status of gynecologic cancers more definitely, based on updated scientific evidence.

REFERENCES

- Odicino F, Pecorelli S, Zigliani L, Creasman WT. History of the FIGO cancer staging system. Int J Gynaecol Obstet 2008; 101: 205-10.
- Pecorelli S. Revised FIGO staging for carcinoma of the vulva, cervix, and endometrium. Int J Gynaecol Obstet 2009; 105: 103-4.
- 3. Prat J. FIGO staging for uterine sarcomas. Int J Gynaecol Obstet 2009; 104: 177-8.
- Pecorelli S, Zigliani L, Odicino F. Revised FIGO staging for carcinoma of the cervix. Int J Gynaecol Obstet 2009; 105: 107-8.
- Creasman W. Revised FIGO staging for carcinoma of the endometrium. Int J Gynaecol Obstet 2009; 105: 109.
- 6. Hacker NF. Revised FIGO staging for carcinoma of the vulva. Int J Gynaecol Obstet 2009; 105: 105-6.
- Petru E, Luck HJ, Stuart G, Gaffney D, Millan D, Vergote I. Gynecologic Cancer Intergroup (GCIG) proposals for changes of the current FIGO staging system. Eur J Obstet Gynecol Reprod Biol 2009; 143: 69-74.