Revised FIGO staging for endometrial cancer

Cancer staging is one of the fundamental activities in oncology and is of pivotal importance to the modern management of cancer patients. It is structured to represent a major prognostic factor in predicting patients' outcome and lending order to the complex dynamic behaviour of a cancer.[1] To optimally manage any malignant disease, certain factors must be taken into consideration: the site of origin of the disease, its biology, and the extent of the disease at the time of presentation, i.e. the stage of the tumour.[2] One of the major purposes of cancer staging, agreed upon internationally, is to offer a classification of a cancer's extent in order to provide a method of conveying one's clinical experience to others for the comparison of treatment methods without ambiguity. Cancer staging is in continual evolution as diagnostic tools change and more prognostic information becomes available. In keeping with this, gynaecologic cancer staging has evolved as well. The International Federation of Gynecology and Obstetrics (FIGO) staging has a long-standing tradition and has led to easier comparisons of treatment results all over the world. However, recent developments in imaging and developments of surgical techniques such as endoscopy are difficult to implement by FIGO because these modalities are not readily available in less developed countries. The FIGO staging is regularly updated, based on new evidence and insight in tumour biology. The most recent adaptation of endometrium cancer staging was recently published (Table I).[3] The rationale for the changes[4-6] that were implemented is described hereafter. In addition, changes that were proposed by the Gynecologic Cancer Intergroup, though not implemented in the new FIGO staging, are discussed.[4]

Table I: Revised FIGO staging for carcinoma of the endometrium[3]

Stage I*	Tumour confined to the corpus uteri
IA*	No or less than half myometrial invasion
IB*	Invasion equal to or more than half of the myometrium
Stage II*	Tumour invades cervical stroma, but does not extend beyond the uterus**
Stage III*	Local and/or regional spread of the tumour
IIIA*	Tumour invades the serosa of the corpus uteri and/or adnexae#
IIIB*	Vaginal and/or parametrial involvement*
IIIC*	Metastases to pelvic and/or para-aortic lymph nodes#
IIIC1*	Positive pelvic nodes
IIIC2*	Positive para-aortic lymph nodes with or without positive pelvic lymph nodes
Stage IV*	Tumour invades bladder and/or bowel mucosa, and/or distant metastases
IVA*	Tumour invasion of bladder and/or bowel mucosa
IVB*	Distant metastases, including intra-abdominal metastases and/or inguinal lymph nodes

* Either G1, G2, or G3.
** Endocervical glandular involvement only should be considered as Stage I and no longer as Stage II.
# Positive cytology has to be reported separately without changing the stage.

1. **Grouping Stage IA and IB**
   Given the comparable outcomes for the old Stage IA and IB that are reported in the FIGO Annual Reports, both were grouped into Stage IA.

2. **Stage II**
   Stage II no longer has a subset A and B. Involvement of the endocervical glandular portion of the cervix is now considered Stage I.

3. **Stage IIIA, peritoneal cytology**
   Positive peritoneal cytology alone should not be enough for classification as Stage IIIA disease. Several reports with multivariate analyses have shown that positive peritoneal cytology is not an independent prognostic factor if endometrial cancer is limited to the uterus,[7-10] but is merely related to other unfavourable prognostic factors such as poor differentiation, deep myometrial infiltration or serous histology. Hence, patients with positive peritoneal cytology should not be upgraded to Stage IIIA, nor to a higher stage in Stage I disease. In cases of "upstaging" the disease by positive peritoneal cytology alone, overtreatment may occur. In the new classification, positive cytology has to be reported separately without changing the stage.

4. **Stage IIIC, inguinal lymph node involvement**
   There are only case reports on patients with inguinal metastases at the time of diagnosis in literature.[11,12] Such patients may carry a rather good prognosis similar to other patients with retroperitoneal metastases. Thus, besides retroperitoneal node involvement, patients with inguinal node metastases could also be allocated to Stage IIIC disease instead of being classified as Stage IVB. However, given the lack of good evidence, the FIGO committee decided to maintain allocation of inguinal node metastases to Stage IVB.

5. **Stage IIIC, retroperitoneal lymph node involvement**
   It is proposed to add the statement that, although

lymphadenectomy[14] is not mandatory to stage all patients with endometrial cancer, it is recommended in operable high-risk clinical Stage I patients and in those with adverse histologic subtypes such as serous or clear cell carcinomas.[13-15] Lymphadenectomy seems to be particularly important in decision-making for adjuvant therapy. Lymph node-negative patients do not benefit from adjuvant radiotherapy, whereas node-positive patients may benefit from chemotherapy. In patients with surgically staged negative nodes, toxicity might be considerably reduced.[16] The increased awareness of para-aortic nodal involvement[17] and its clinical importance[18] results in a separate classification. As a result, Stage IIIC is now categorised as IIIC1 (indicating positive pelvic nodes) and IIIC2 (indicating positive para-aortic nodes with or without positive pelvic nodes). Although the FIGO committee thus validates the importance of para-aortic node involvement, there is no definition of the extent and quality of lymphadenectomy. Complete para-aortic lymphadenectomy refers to the renal vessels rather than the inferior mesenteric artery as the upper border. [6]

6. Subdivision of Stage IVB

The prognosis of patients with peritoneal involvement is distinctly better than those with parenchymal-visceral and/or extra-abdominal metastases.[13] However, the FIGO committee maintained the old classification.

Clinicians need to implement the new FIGO staging in their practice and the reason why is twofold: (1) to allow comparison of patients between centres and (2) to divide patients and their tumours into prognostic groups.

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