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Cervical Cancer: 2018 FIGO Staging

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FIGO Staging of Carcinoma of the Cervix Uteri (2018)

•Stage I: The carcinoma is strictly confined to the cervix uteri (extension to the corpus would be disregarded)

IA **Invasive carcinoma that can be diagnosed only by microscopy with measured deepest invasion < 5.0 mm**

IA1 **Measured stromal invasion < 3.0 mm**

IA2 **Measured stromal invasion \geq 3.0 mm and < 5.0 mm**

(The involvement of vascular/lymphatic spaces does not change the staging.)

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

- **Stage I: The carcinoma is strictly confined to the cervix uteri (extension to the corpus would be disregarded)**

IB Invasive carcinoma with measured deepest invasion > 5.0 mm, limited to the cervix uteri

IB1 Invasive carcinoma \geq 5.0 mm depth of invasion and < 2.0 cm in greatest dimension

IB2 Invasive carcinoma \geq 2.0 cm and < 4.0 cm in greatest dimension

IB3 Invasive carcinoma \geq 4.0 cm in greatest dimension

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Comment:

- Stage I cervical cancer is limited to the cervix. If there is only microscopic invasion less than 5.0 mm, it is assigned stage IA, further subdivided as stage IA1 and IA2 at a cut-off of 3.0 mm. The lateral extent of the lesion is no longer taken into consideration.
- In stage IB, an additional cut-off at 2 cm has been introduced, based on oncological data from fertility-sparing operations including conization in stage IA and radical trachelectomy in early stage IB. Recurrence rates are significantly lower in patients whose primary stage I tumors are less than 2.0 cm compared with those who have tumors measuring 2.0-4.0 cm in their greatest dimension.

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Controversial issues:

- *Presence of vascular/lymph space invasion:* Lymphovascular space invasion does not change the stage.
- *Extension to the uterine corpus:* Involvement of the uterine body does not change the stage.

Recommendations:

- The size and extent of the primary tumor can be assessed by clinical evaluation (pre- or intraoperative), imaging, and/or pathological measurement.

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Recommendations:

- Methods of imaging include ultrasound (US), computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomography (PET), PET-CT, MRI-PET, etc. MRI has been shown to have the best sensitivity and specificity in assessing the size of the lesion. However, ultrasound has been shown to provide comparable information for staging in the hands of experienced operators.
- In operated patients, the histopathological examination will provide information on size and extent of lesion.
- The final stage is to be assigned after receiving all reports. The method of recording the size and assigning stage should be noted.

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

- Stage II Cervical carcinoma invades beyond the uterus, but not to the lower third of the vagina or to the pelvic wall

IIA Without parametrial invasion

IIA1 Invasive carcinoma < 4.0 cm in greatest dimension

IIA2 Invasive carcinoma \geq 4.0 cm in greatest dimension

IIB With parametrial invasion

FIGO Staging of Carcinoma of the Cervix Uteri

Comment: In stage II, the tumor has extended beyond the uterus into the vagina and parametrium but not to the lower third of the vagina and not reaching the pelvic wall. In the sub-stages, the size of the lesion can be measured clinically, on imaging, or pathology, as in stage I.

Controversial issues:

- *Use of imaging for assessment of parametrial involvement:* The utility of imaging for evaluation of parametrium and upper vagina is less clear. MRI has been shown to perform better than CT scan for parametrial assessment. False negative as well as false positive results have been reported especially when there is infection or with larger tumor size and stretching of the upper vagina by the growth

FIGO Staging of Carcinoma of the Cervix Uteri

Controversial issues:

• *Involvement of ovary:* Involvement of the ovary has been reported in <1% of cases of squamous cell carcinoma and in <5% of cases of nonsquamous cell carcinoma in early stage cervical cancer. Since it is often associated with the presence of other risk factors, there are limited data on its impact on survival as an independent risk factor. Presently, ovarian involvement does not change the stage.

Recommendations:

- Colposcopy may be used to assess the extent of vaginal involvement. Examination under anesthesia may be useful to improve the accuracy of clinical assessment where imaging facilities are lacking.
- As in stage I, the method used to assess tumor size and extent should be recorded

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Stage III The carcinoma involves the lower third of the vagina and/or extends to the pelvic wall and/or causes hydronephrosis or non-functioning kidney and/or involves pelvic and/or paraaortic lymph nodes

- **IIIA** Carcinoma involves the lower third of the vagina, with no extension to the pelvic wall
- **IIIB** Extension to the pelvic wall and/or hydronephrosis or non-functioning kidney
- **IIIC** Involvement of pelvic and/or paraaortic lymph nodes, irrespective of tumor size and extent (with r and p notations)
 - IIIC1** Pelvic lymph node metastasis only
 - IIIC2** Paraaortic lymph node metastasis

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

- **Comment:** In stage III, the tumor has extended to the lower third of the vagina and/or reached the pelvic wall. Identification of hydronephrosis or a non-functioning kidney by any method assigns the case to stage IIIB regardless of other findings.
- Similarly, the presence of pelvic or paraaortic lymph node metastases assigns the case to stage IIIC regardless of other findings, as they have poorer survival compared to those who do not have lymph node metastases. Pelvic and paraaortic lymph node involvement is allocated to stage IIIC1 and IIIC2, respectively

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Controversial issues in Stage III:

- Presence of isolated tumor cells (ITCs) or micrometastases; Metastases in lymph nodes have been graded as ITCs (<0.2 mm), micrometastases (0.2-2.0 mm) or macrometastases (>2.0 mm). Presence of ITCs or micrometastases signifies low volume metastasis and their implication is not clear. The presence of micrometastases or isolated tumor cells may be recorded but their presence does not change the stage.
- Differentiating metastases from infection: In many countries with a high cervical cancer burden there is also a high prevalence of infection with tuberculosis and human immunodeficiency virus (HIV). In these endemic areas, there is a possibility of nodes being enlarged without metastases. The assessment of metastatic lymph nodes versus infected lymph nodes does not have clear radiological criteria.

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Controversial issues in Stage III:

- Sentinel lymph nodes: Sentinel lymph node dissection is commonly used in vulvar and endometrial cancer. In cervical cancer, good sensitivity and specificity has been reported with acceptable false negative rates.
- Appropriate facilities and expertise should be available to validate and follow the protocol for the sentinel lymph node approach, which also requires good backup of pathology for ultrastaging and immunohistochemistry. Following the protocol is essential for this procedure.

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Recommendations:

- Surgicopathological assessment of lymph node involvement requires advanced surgical skills, whether performed by conventional or MIS route.
- Since 85% of cases presently occur in low resource settings, the required professional skills and infrastructure facilities are presently not widely available. Pathological confirmation is the gold standard but imaging can be used to interpret disease extent.
- The choice of imaging modality for nodal evaluation has not been fixed by FIGO. It depends upon the availability of the imaging modality and patients' affordability. Non-availability of an imaging modality should not be a reason for undue delay in initiation of treatment.

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

Recommendations:

- FIGO does not define criteria to discriminate between malignancy and inflammation / infection on imaging, which is left to the discretion of the clinician. The clinician must opine on whether these look suspicious enough to upstage the case or not.
- The best available technology should be used for assessment, and the lowest appropriate stage should be assigned, i.e., when in doubt assign the lower stage.
- At the present time, lack of facilities universally is recognized and clinical assessment of staging with the use of other facilities as available is permissible. The method of assigning the stage is to be recorded and reported.



FIGO Staging of Carcinoma of the Cervix Uteri (2018)

- **Stage IV** The carcinoma has extended beyond the true pelvis or has involved (biopsy proven) the mucosa of the bladder or rectum.

[A bullous edema, as such, does not permit a case to be allotted to Stage IV].

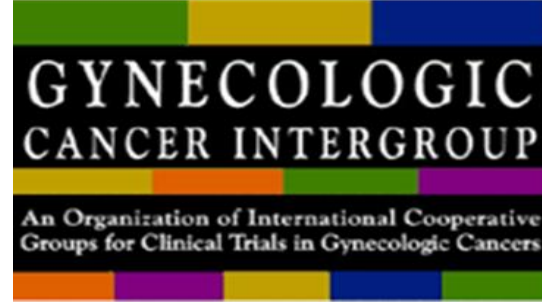
IVA Spread to adjacent organs

IVB Spread to distant organs

FIGO Staging of Carcinoma of the Cervix Uteri (2018)

- **Comment:** Stage IV remains unchanged.
- **Controversial issues:** Loss of fat planes at imaging may suggest involvement of bladder and rectum but does not necessarily imply invasion by tumor.
- **Recommendations:** Evaluation of the bladder and rectum by cystoscopy and proctosigmoidoscopy, respectively, is recommended if the patient is symptomatic. Cystoscopy should be considered in cases with a barrel-shaped endocervical growth, extension of growth to the anterior vaginal wall. Histological confirmation should be done to assign the case to stage IV.

**Gynecologic Cancer InterGroup
Imaging & Pathology Brainstorming Day
October 2018 Munich**



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QUESTIONS?

THANK YOU!