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EDITORIAL

The revised FIGO staging of cervical cancer (2018) – Implications for the LMICs

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The International Federation of Gynecology and Obstetrics (FIGO) was the first organisation to develop a staging system. Thus cervical cancer was the first cancer to be staged in 1958, after the culmination of a series of efforts initiated since 1928, and staging of other organs followed.[1] A staging classification is designed to reflect the survival differences that ensue as the cancer progresses and spreads. This helps to assess prognosis, plan optimum management strategies, and compare data between centres, as well as within centres over a period of time. It is therefore important that it should be based on universally applicable knowledge, skills and resources. As advances occur and data accrue, the classification is revised periodically to reflect current knowledge and understanding.

The FIGO Committee for Gynecologic Oncology last revised the staging of cervical cancer in 2009. Although the staging of endometrial and ovarian cancers had been revised to a surgico-pathological staging, a decision was taken to retain the clinical staging as 85% of cervical cancers occur in the low middle-income countries (LMICs) where facilities for imaging and pathology are limited.[2] However, the clinical staging of cervical cancer had clear limitations – the volume of the tumour could not be detected accurately based on clinical examination alone; parametrial involvement was sometimes fallacious; most importantly, lymph node involvement could not be detected clinically, and when found positive at surgery did not change the stage, even though it was a well known fact that the prognosis was significantly poorer if there were metastases to the pelvic nodes and, even worse, if para-aortic nodes were positive. An important repercussion of the inadequate preoperative assessment based on clinical methods, along with some basic investigations that FIGO allowed to change the staging, was that many patients received multimodal treatment: surgery was followed by radiation or chemoradiation, which had severe implications for morbidity even though the mortality might not be worse.[3-6] This also had implications for inappropriate use of resources in already resource-constrained conditions.

The last decade witnessed significant improvements in the field of imaging as well as great strides in expertise in the use of minimally invasive surgical (MIS) techniques in oncology. Widespread use of imaging modalities like ultrasound, computed tomography (CT scans), magnetic resonance imaging (MRI) and positron emission tomography (PET), alone or in combination as PET-CT and PET-MRI, began to be increasingly used not only in high and middle-income countries but in many parts of the LMICs as well. Various studies showed that all these techniques, including ultrasound in expert hands, yielded comparable results in evaluation of tumour size. Detection of enlarged pelvic and para-aortic lymph nodes was also comparable.[7-10] Many centres began to use this information to influence management plans. With enhanced capability in MIS, sampling of enlarged lymph nodes became the norm. Even in some LMICs, this became the standard of care, whether done by the MIS route or laparotomy. The information thus gained was used to determine whether the patient would receive surgery or radiotherapy, and in the case of the latter, to determine the need for extended field radiation. Such centres began to use, therefore, a system of "surgical staging" that was neither uniform nor reproducible.

The FIGO Committee for Gynecologic Oncology therefore began the process of revising the staging in 2016. The process involved reviewing the literature, drafting the proposal with inputs from all major gynaecologic oncology society and related organisations, development of a consensus document and, finally, the revised staging. This was not an easy task as cervical cancer is a disease of inequity. Keeping in mind the special considerations such as socioeconomic factors, resource constraints, and varied access, it was decided to have an open system that would allow staging to be based on clinical findings (as before), or use findings on imaging and/or pathology to change the staging. Thus the final stage is now to be assigned after investigations or surgery. Additionally, the most important changes were as follows:

1. In Stage IA, keeping only depth of invasion as the criterion and removal of the criterion of lateral dimension of 7 mm, as there was no substantial evidence to support this.
2. In Stage IB, addition of a new cut-off at 2 cm in Stage I, which is now subdivided as Stage 1B1, 1B2 and 1B3, based on data from radical trachelectomy that shows a substantial survival difference at this cut-off.
3. A new Stage IIIC has been added to include all cases with lymph node involvement, irrespective of other findings. Pelvic nodes are assigned C1, para-aortic nodes are assigned C2. If this was determined based on radiological findings, a notation of r is added (C1r or C2r). If this is based on pathology (cytology or histology), a notation of p is added (C1p or C2p).

The revised FIGO staging was presented at the FIGO World Congress at Rio de Janeiro in October 2018[11] and subsequently published in the International Journal of Gynecology and Obstetrics.[12] It has been hailed by all societies as a great step forward. However, there remain many controversial issues that are unresolved at this time. Some of these were present previously as well, and continue in the grey zone in the present classification also in the absence of substantial data, e.g.

i. ovarian involvement, which does not change the stage, but does have prognostic value. At some future date, this may be assigned a higher stage, but presently there are not enough data to accept this;

ii. lymphovascular space involvement and micrometastases, whose presence is to be recorded but does not change the stage. Other issues like sentinel nodes have not been dealt with at all for the same reason.

More importantly, the revised staging raises questions on assessment of lymph node involvement by radiological methods. This is especially important in areas with a high burden of tuberculosis and HIV infection, which may manifest with enlarged lymph nodes that are not metastatic. Here the onus of the decision has been left to the clinician to decide whether or not this is indicative of tumour spread and to assign the stage accordingly. It is extremely important to collect data that will determine the validity of these changes and inform future staging changes.

Physicians who work in the LMICs are invariably struggling with a large patient load and this has been cited as the reason for poor data recording and reporting. However, this results in a wealth of data being left off the radar. The paradigm must change and physicians must consider it as important to complete this information as the care of the patient. Unless we record and analyse our data, we cannot contribute to the huge body of evidence-based medicine that informs the way our patients are managed and cared for. Harnessing latest systems of e-platforms and mobile technology will be the way forward so that LMICs who bear the brunt of this disease can be in the forefront of decision-making and care.

References

1. Odicino F, Pecorelli S, Zigliani L, Creasman WT. History of FIGO cancer staging. Int J Gynecol Obstet. 2008;1;101(2):205-10.
2. 23-Cervix-uteri-fact-sheet.pdf. Available from://gco.iarc.fr/today/data/factsheets/cancers/23-cervix-uteri-fact-sheet.pdf. [Accessed 19 Jun 2019].
3. Gonzalez AD, Graniel CL, Enciso G, et al. Phase II study of multimodality treatment for locally advanced cervical cancer: neoadjuvant carboplatin and paclitaxel followed by radical hysterectomy and adjuvant cisplatin chemoradiation. Annals Oncol. 2003;14(8):1278-84.
4. Minig L, Patrono MG, Romero N, et al. Different strategies of treatment for uterine cervical carcinoma stage IB2-IIB. World J Clin Oncol. 2014;5:86–92.
5. Yeo RM, Chia YN, Namuduri RP, et al. Tailoring adjuvant radiotherapy for stage IB-IIA node negative cervical carcinoma after radical hysterectomy and pelvic lymph node dissection using the GOG score. Gynecol Oncol. 2011;123:225-229.
6. Landoni F, Maneo A, Colombo A, et al. Randomised study of radical surgery versus radiotherapy for stage Ib-IIa cervical cancer. Lancet. 1997;350:535-540.
7. Rose PG, Adler LP, Rodriguez M, Faulhaber PF, Abdul-Karim FW, Miraldi F. Positron emission tomography for evaluating para-aortic nodal metastasis in locally advanced cervical cancer before surgical staging: A surgicopathologic study. J Clin Oncol. 1999;17:41-45.
8. Yang WT, Lam WW, Yu MY, Cheung TH, Metreweli C. Comparison of dynamic helical CT and dynamic MR imaging in the evaluation of pelvic lymph nodes in cervical carcinoma. Am J Roentgenol. 2000;175:759-766.
9. Havrilesky LJ, Kulasingam SL, Matchar DB, Myers ER. FDG-PET for management of cervical and ovarian cancer. Gynecol Oncol. 2005;97:183-191.
10. Fischerova D, Cibula D, Stenhova H, et al. Transrectal ultrasound and magnetic resonance imaging in staging of early cervical cancer. Int J Gynecol Cancer. 2008;18:766-772.
11. Bhatla N, Berek JS, Cuello M, Denny LA, Grenman S, Karunaratne K, et al. New revised FIGO staging of cervical cancer (2018). Abstract S020.2. Presented at the FIGO XX11 World Congress of Gynecology and Obstetrics, Rio de Janeiro, Brazil, October 14-19, 2018. Int J Gynecol Obstet. 2018;143(Suppl 3); doi:10.1002/ijgo.12584.
12. Bhatla N, Berek JS, Fredes MC, Denny LA, Grenman S, Karunaratne K, et al. Revised FIGO staging for carcinoma of the cervix uteri. Int J Gynecol Obstet. 2019. 145(1);129-135.