Histological grade (Core)

Reason/Evidentiary Support

The FIGO grading system for endometrioid adenocarcinomas of the uterine corpus is based on the following architectural features:[1]

        Grade 1: 5% or less non-squamous solid growth pattern
        Grade 2: 6% to 50% non-squamous solid growth pattern
        Grade 3: >50% non-squamous solid growth pattern

Notable nuclear atypia, which exceeds that which is routinely expected for the architectural grade, increases the tumour grade by 1. Notable nuclear atypia should be present in >50% of the tumour.[2]

In addition, the following guidelines should be used in grading:

    (1)   Non-gland forming squamous elements should be disregarded for grading purposes.
    (2)   Endometrioid and mucinous carcinomas should be graded using the FIGO grading system.
    (3)   Serous, clear cell and undifferentiated carcinomas and carcinosarcomas are not graded but are regarded as high grade neoplasms.[3] When the dataset is being completed, these should be designated as "not applicable" for histologic grade.
    (4)   In mixed carcinomas, the highest grade should be assigned.

In general, if there is a discrepancy between the grade of an endometrioid adenocarcinoma in the pre-operative biopsy and the final resection specimen, the final histological tumour grade should be based on findings in the hysterectomy specimen, which usually contains a larger volume of tumour for assessment. This is particularly important if the hysterectomy specimen contains abundant low-grade tumour and the biopsy showed grade 3 endometrioid adenocarcinoma. In this specific situation, application of the guidelines for FIGO grading may result in the tumour being downgraded, although this will not always be the case; for example, where the biopsy contained abundant grade 3 endometrioid adenocarcinoma and the hysterectomy a limited amount of low-grade tumour, the final diagnosis might still be grade 3 endometrioid adenocarcinoma.

References

1   Creasman W, Odicino F and Maisonneuve P et al (2001). Carcinoma of the corpus uteri: FIGO Annual Report. *J Epidemiol Biostat* 6:45-86.

2   Zaino RJ, Kurman RJ, Diana KL and Morrow CP (1991). The utility of the revised International Federation of Gynecology and Obstetrics histologic grading of endometrial adenocarcinoma using a defined nuclear grading system. A Gynecologic Oncology Group study. *Cancer* 75(1):81-86.

3   FIGO Committee on Gynecological Cancer (2009). Revised FIGO staging for carcinoma of the vulva, cervix and endometrium. *Int. J. Gynecol. Obstet.* 105:103-104.