Margin status (Core and Non-core)

The status of all surgical resection margins should be recorded (ectocervical, endocervical, radial/deep stromal and vaginal cuff). At the time of specimen grossing, it may be useful to ink the various resection margins with different colours to assist precise margin recognition.

The recording of margin involvement by tumour is a core data element. When invasive carcinoma is close to a surgical margin, documentation of the distance to the margin is non-core. No data are available to indicate the optimal margin of clearance of carcinoma in simple hysterectomy, trachelectomy, cone or loop biopsy specimens. Consistent recording of the distance to the margins will enable data to be collected prospectively and provide evidence for future practice. A small number of retrospective studies has assessed the impact of close margins on local and overall recurrence in patients undergoing radical hysterectomy for cervical cancer.[1] The crude local recurrence rate was 20% in 284 patients with International Federation of Gynaecology and Obstetrics Stage IB carcinomas with 'close' margins (close was defined as <10 millimetres (mm)) in one study.[2] In the same study, patients with negative margins, defined as a clearance of ≥10 mm, had a crude recurrence rate of 11%.[2] Another study of close surgical margins after radical hysterectomy in early-stage cervical cancer found that close surgical margins, defined as ≤5 mm, were associated with recurrence rates of 24% as compared with recurrence rates of only 9% in patients with negative margins.[3] In the same study, close surgical margins were significantly associated with positive lymph nodes, parametrial involvement, larger tumour size, deeper stromal invasion and lymphovascular invasion.[3]

In occasional cases where tumour involvement of the margin cannot be determined for various reasons (processing artefact, multiple pieces or poor tissue orientation), the margin status should be specified as 'cannot be assessed' and the reason explained. In hysterectomy or trachelectomy specimens, the lateral radial margin may consist of parametrial soft tissue, which should be measured (see **SPECIMEN DIMENSIONS**), based on gross examination, and calculated into the margin evaluation. In contrast, anterior and posterior radial/deep stromal margins in a hysterectomy specimen will consist of cervical stromal tissue.

The presence of margin involvement by high grade squamous intraepithelial lesion, adenocarcinoma in situ or stratified mucin-producing intraepithelial lesion should be documented (core element). If not involved, the distance to the resection margin is a non-core element, although, as with invasive tumour, there are no data available to indicate the optimal margin of clearance. In hysterectomy specimens with Stage IA or small IB carcinomas, the entire cervix should be assessed histologically to ensure an accurate measurement of the extent of the disease and surgical margins.[4-7]

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