Invasive Cervical Cancer: Squamous Cell, Adenocarcinoma, Adenosquamous

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CLINICAL PRESENTATION

INITIAL EVALUATION

STAGING

PRIMARY TREATMENT

-- Cone biopsy with ECC
-- Chest X-ray
-- Testing for HIV
-- Hepatitis screening
-- Rapid Plasma Reagin Test (RPR)

Greater than 3 mm and less than or equal to 5 mm of stromal invasion with an extension of less than or equal to 7 mm

No

IA1

- Observation (if fertility desired)
- Simple hysterectomy

Yes

Stage IB – See page 2

Stage IA2 – See box A

ECC or margins positive?

Repeat cone and ECC

Assign stage based on findings

High risk

Post-operative radiotherapy with concurrent chemotherapy

Intermediate risk

Post-operative radiotherapy with or without concurrent chemotherapy

Low risk

Radical hysterectomy

Radical trachelectomy (if fertility desired) and pelvic lymph node dissection

Radiotherapy

Surveillance: See Page 4

Post-operative radiotherapy

High risk factors are positive nodes, positive margins, or parametrial involvement.

Intermediate risk factors (see Sedlis A. et al.)

1 See Appendix A for FIGO Staging
2 ECC = Endocervical Curettage
3 Hysterectomy may be performed through open or minimally invasive techniques based on surgeon/patient discretion
4 Concurrent weekly Cisplatin
5 Concurrent weekly Cisplatin
6 Intermediate risk factors (see Sedlis A. et al.)
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1 See Appendix A for FIGO Staging
2 Relative indications in favor of Primary Radiation Therapy are: + Nodes, extensive LVSI, deep stromal invasion.
3 All trachelectomy patients should get MRI
4 High risk factors are positive nodes, positive margins, or parametrial involvement.
5 Concurrent weekly Cisplatin
6 Intermediate risk factors (see Sedlis A. et al.)
7 Consider extraperitoneal surgical staging

**STAGING**

**PRIMARY TREATMENT**

- Yes
  - Radical hysterectomy and pelvic node dissection OR
  - Radical trachelectomy (if fertility desired) and pelvic lymph node dissection
- No
  - Radiotherapy with or without concurrent chemotherapy

**CLINICAL PRESENTATION**

**INITIAL EVALUATION**

- Stage IB1
  - Imaging as indicated: PET, CT, Pelvic MRI
  - Surgical candidate?

- Stage IB2
  - Imaging as indicated: PET, CT, Pelvic MRI, Cystoscopy, proctoscopy
  - Stage IIA
  - Stage IIB
  - Stage IIIA/B
  - Stage IVA
  - Stage IVB or distant metastases on imaging

- Surveillance: See Page 4

- Low risk
  - Surveillance: See Page 4

- Intermediate risk
  - Post-operative radiotherapy with or without concurrent chemotherapy

- High risk
  - Post-operative radiotherapy with concurrent chemotherapy

- Supportive care
  - Palliative treatment
  - Definitive management considered in rare cases with localized metastatic disease
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1 Weekly Cisplatin
2 If not candidate, supportive care and palliative treatment
3 See Appendix B for chemotherapy regimens

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Surveillance:
- Interval H&P
- Cervical /vaginal cytology annually
- Laboratory assessment (CBC, BUN, Creatinine) as clinically indicated
- Imaging including CXR as clinically indicated
- Recommended use of vaginal dilator after radiation treatment
- Consider vaginal estrogen cream and/or bone care for radiated patients
- Exenteration surveillance based on clinical indications
### APPENDIX A: FIGO Staging

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Carcinoma is strictly confined to the cervix (extension to the corpus would be disregarded)</td>
</tr>
<tr>
<td></td>
<td>IA: Invasive carcinoma which can be diagnosed only by microscopy, with deepest invasion less than or equal 5 mm and largest extension less than or equal 7 mm</td>
</tr>
<tr>
<td></td>
<td>IA1: Measured stromal invasion less than or equal to 3 mm in depth and extension of less than or equal 7 mm</td>
</tr>
<tr>
<td></td>
<td>IA2: Measured stromal invasion greater than 3 mm and less than or equal 5 mm with an extension of less than or equal 7 mm</td>
</tr>
<tr>
<td></td>
<td>IB: Clinically visible lesions limited to the cervix uteri or pre-clinical cancers greater than stage IA&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>IB1: Clinically visible lesion less than or equal 4 cm in greatest dimension</td>
</tr>
<tr>
<td></td>
<td>IB2: Clinically visible lesion greater than 4 cm in greatest dimension</td>
</tr>
<tr>
<td>II</td>
<td>Cervical carcinoma invades beyond the uterus, but not to the pelvic wall or to the lower third of the vagina</td>
</tr>
<tr>
<td></td>
<td>IIA: Without parametrial invasion</td>
</tr>
<tr>
<td></td>
<td>IIA1: Clinically visible lesion less than or equal 4 cm in greatest dimension</td>
</tr>
<tr>
<td></td>
<td>IIA2: Clinically visible lesion greater than 4 cm in greatest dimension</td>
</tr>
<tr>
<td></td>
<td>IIB: Without obvious parametrial invasion</td>
</tr>
<tr>
<td>III</td>
<td>Tumor extends to the pelvic wall and/or involves lower third of the vagina and/or causes hydronephrosis or non-functioning kidney&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>IIIA: Tumor involves lower third of the vagina, with no extension to the pelvic wall</td>
</tr>
<tr>
<td></td>
<td>IIIB: Extension to the pelvic wall and/or hydronephrosis or non-functioning kidney</td>
</tr>
<tr>
<td>IV</td>
<td>IVA: Spread or growth to adjacent organs</td>
</tr>
<tr>
<td></td>
<td>IVB: Spread to distant organs</td>
</tr>
</tbody>
</table>

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<sup>1</sup> All macroscopically visible lesions even with superficial invasion are allotted to stage IB carcinomas. Invasion is limited to a measured stromal invasion with a maximal depth of 5 mm and a horizontal extension of less than or equal to 7 mm. Depth of invasion should not be greater than 5 mm taken from the base of the epithelium of the original tissue superficial or glandular. The depth of invasion should always be reported in mm, even in those cases with “early (minimal) stromal invasion” (<~1.0 mm). The involvement of vascular/lymphatic spaces should not change the stage allotment.

<sup>2</sup> On rectal examination, there is no cancer-free space between the tumor and the pelvic wall. All cases with hydronephrosis or non-functioning kidney are included, unless they are known to be due to another cause.
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APPENDIX B: Chemotherapy Regimens

<table>
<thead>
<tr>
<th>Recurrence or Metastatic Therapy</th>
<th>First Line</th>
<th>Second Line</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paclitaxel, cisplatin and bevacizumab</td>
<td>Bevacizumab</td>
</tr>
<tr>
<td></td>
<td>Paclitaxel and cisplatin</td>
<td>Docetaxel</td>
</tr>
<tr>
<td></td>
<td>Paclitaxel and carboplatin</td>
<td>Fluorouracil</td>
</tr>
<tr>
<td></td>
<td>Topotecan and cisplatin</td>
<td>Gemcitabine</td>
</tr>
<tr>
<td></td>
<td>Cisplatin and gemcitabine</td>
<td>Ifosfamide</td>
</tr>
<tr>
<td></td>
<td>Cisplatin</td>
<td>Irinotecan</td>
</tr>
<tr>
<td></td>
<td>Carboplatin</td>
<td>Mitomycin</td>
</tr>
<tr>
<td></td>
<td>Paclitaxel</td>
<td>Topotecan</td>
</tr>
<tr>
<td></td>
<td>Abraxane</td>
<td>Pemetrexed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vinorelbine</td>
</tr>
</tbody>
</table>

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**SUGGESTED READINGS**


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DEVELOPMENT CREDITS

This practice guideline is based on majority expert opinion of the Gynecologic Oncology Faculty at the University of Texas, MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following medical oncologists, radiation oncologists, surgical oncologists, and interventional radiologists:

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