Conservative surgery in early-stage cervical cancer

Dr Marie Plante
Gynecologic Oncologist
Full Professor
L’Hôtel-Dieu de Québec
Université Laval, Canada

Cervix Cancer Education Symposium, January 2019
Evolution in the management of cervical cancer

1900: Wertheim Abd Rad Hyst

1980: Schauta Vag Rad Hyst

1990: Vaginal Rad Trachelectomy

2000: Simple Trach & SN? Cone & SN?

2010: Abdominal Rad Trachelectomy

Simple Trach & SN? Cone & SN?

SLN mapping

Neoadjuvant Chemotx?

TP LN dissection

RP LN dissection

SLN mapping

Cone & SN?

Simple Trach & SN?

Neoadjuvant Chemotx?

Abdominal Rad Trachelectomy

Laparoscopic Rad Trachelectomy

Robotic Rad Trachelectomy

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Radical Trachelectomy

 VAGINAL approach

Professor Daniel Dargent
Oncological outcomes after fertility-sparing surgery for cervical cancer: a systematic review

Enrica Bentivegna, Sebastien Gouy, Amandine Maulard, Cyrus Chargari, Alexandra Leary, Philippe Morice

159 studies
3098 patients

<table>
<thead>
<tr>
<th>Series and case reports</th>
<th>Dargent's procedure</th>
<th>Abdominal radical trachelectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Laparotomic</td>
<td>Laparoscopic</td>
</tr>
<tr>
<td>Number series or case reports</td>
<td>21</td>
<td>28</td>
</tr>
<tr>
<td>Number of patients</td>
<td>1523</td>
<td>866</td>
</tr>
<tr>
<td>Patients excluded†</td>
<td>159</td>
<td>206</td>
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</table>

<table>
<thead>
<tr>
<th>Tumour characteristics</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage‡</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA</td>
<td>316</td>
<td>153</td>
<td>55</td>
</tr>
<tr>
<td>IB1</td>
<td>1065</td>
<td>559</td>
<td>215</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>&gt;2 cm</td>
<td>At least 84</td>
<td>At least 167</td>
<td>At least 42</td>
</tr>
<tr>
<td>IB2</td>
<td>3</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>IIA</td>
<td>9</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Tumour type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squamous-cell carcinoma</td>
<td>892</td>
<td>549</td>
<td>167</td>
</tr>
<tr>
<td>Adenocarcinoma</td>
<td>432</td>
<td>168</td>
<td>50</td>
</tr>
<tr>
<td>Other, mixed, or unknown</td>
<td>199</td>
<td>44</td>
<td>35</td>
</tr>
<tr>
<td>LVSI positive</td>
<td>401</td>
<td>At least 198</td>
<td>At least 52</td>
</tr>
</tbody>
</table>

| Oncological outcomes   |                     |                                |                |
| Recurrent disease      | 58                   | 31                             | 15             | 6.0%            |
| Died from disease      | 24                   | 9                              | 3              | 0               |

Lancet Oncol. 2016 Jun;17(6):e240-e253

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# Oncological outcomes after fertility-sparing surgery for cervical cancer: a systematic review

Enrica Bentivegna, Sebastien Gouy, Amandine Maulard, Cyrus Chargari, Alexandra Leary, Philippe Morice

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<td>159</td>
<td>206</td>
</tr>
<tr>
<td><strong>Fertility outcomes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancies</td>
<td>487</td>
<td>175</td>
</tr>
<tr>
<td>Fetal loss (trimester 1 or 2)</td>
<td>103</td>
<td>37</td>
</tr>
<tr>
<td>Preterm delivery</td>
<td>104</td>
<td>21</td>
</tr>
<tr>
<td>Pregnancy rate†</td>
<td>216/343 (63%)</td>
<td>114/235 (49%)</td>
</tr>
</tbody>
</table>

© Dre. Plante
The vaginal radical trachelectomy: An update of a series of 125 cases and 106 pregnancies

Marie Plante *, Jean Gregoire, Marie-Claude Renaud, Michel Roy

Recurrences: 6/125 (4.8%)
Deaths: 2/110 (1.6%)

Risk factor associated with recurrence

Size of the lesion > 2 cm (p=0.001)
- 10% of ptses had lesions > 2 cm
- Represent 50% of the recurrences
Vaginal Radical Trachelectomy for early stage cervical cancer. Results of the Danish National Single Center Strategy

L. Hauerberg a,*, C. Høgdall a, A. Loft b, C. Ottosen a, S.F. Bjoern a, B.J. Mosgaard a, L. Nedergaard c, H. Lajer a

N=120

6 recurrences (5.1%); 2 deaths (1.7%)

7 patients had lesions >2 cm (5.8%)

3 recurrences (50%)
Long-Term Outcomes After Fertility-Sparing Laparoscopic Radical Trachelectomy in Young Women With Early-Stage Cervical Cancer: An Asan Gynecologic Cancer Group (AGCG) Study

JEONG-YEOL PARK, MD, PhD,1 WON DEOK JOO, MD, PhD,2 SUK-JOON CHANG, MD, PhD,3 DAE-YEON KIM, MD, PhD,1 JONG-HYEOK KIM, MD, PhD,1 YONG-MAN KIM, MD, PhD,1 YOUNG-TAK KIM, MD, PhD,1 AND JOO-HYUN NAM, MD, PhD1*

Tumor size
- < 2 cm (n=50)
- > 2 cm (n=29)

Cervical stromal invasion
- < 50% (n=57)
- > 50% (n=22)

Disease-free Survival

Follow-up Time (years)

P = 0.039

P = 0.016

Radical Trachelectomy

- Careful patient selection
  - **SIZE** of the lesion
    - Most important prognostic factor
  - Meticulous preoperative evaluation: critical
  - **MRI:** high quality
  - **Pathology review:** expert pathologist
Radical Trachelectomy

Considerable evolution in the radical trachelectomy technique (last 30 years)

« Proof of concept »

Radical Trachelectomy now considered « standard of care » in young women who wish to preserve fertility
NCCN Guidelines Version 1.2017
Cervical Cancer

CLINICAL STAGE

Stage IA1 (no lymphovascular space invasion [LVS1])

- Cone biopsy\(^f\) with negative margins\(^g\) (preferably a non-fragmented specimen with 3-mm negative margins\(^g\))
  (If positive margins, repeat cone biopsy or perform trachelectomy)

  → See Surveillance (CERV-10)

Stage IA1 (with LVS1) and Stage IA2

- Cone biopsy\(^f\) with negative margins\(^g\) (preferably a non-fragmented specimen with 3-mm negative margins\(^g\))
  (if positive margins, repeat cone biopsy or perform trachelectomy)
  + pelvic lymph node dissection
  ± para-aortic lymph node sampling (category 2B)
  (Consider sentinel lymph node [SLN] mapping\(^h\))
  or
  Radical trachelectomy + pelvic lymph node dissection\(^h\)
  ± para-aortic lymph node sampling (category 2B)
  (Consider SLN mapping\(^h\))

  → See Surveillance (CERV-10)

Stage IB1\(^d\)

- Radical trachelectomy
  + pelvic lymph node dissection\(^h\)
  ± para-aortic lymph node sampling\(^h\)
  (Consider SLN mapping\(^h\))

  → See Surveillance (CERV-10)

---

\(^b\) See Principles of Imaging (CERV-A).

\(^c\) Fertility-sparing surgery for stage IB1 has been most validated for tumors ≤2 cm. Small cell neuroendocrine histology and adenoma malignum are not considered suitable tumors for this procedure.

\(^d\) No data to support a fertility-sparing approach in small neuroendocrine tumors, gastric type adenocarcinoma, or adenoma malignum (also known as minimal deviation adenocarcinoma). Total hysterectomy after completion of childbearing is at the patient’s and surgeon’s discretion, but is strongly advised in women with continued abnormal pap smears or chronic persistent HPV infection.

\(^e\) Cold knife conization (CKC) is the preferred method of diagnostic excision, but loop electrosurgical excision procedure (LEEP) is acceptable, provided adequate margins and proper orientation are obtained. Endocervical curettage (ECC) may be added as clinically indicated.

\(^f\) Negative for invasive disease or histologic high-grade squamous intraepithelial lesion (HSIL) at margins.

\(^g\) See Principles of Evaluation and Surgical Staging (CERV-B).

\(^h\) For SLN mapping, the best detection rates and mapping results are in tumors <2 cm.

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.
Radical Trachelectomy

Is radical surgery necessary in low risk small volume disease (< 2 cm)?
Less radical surgery

FIGO Staging

**Table 2**
Carcinoma of the cervix uteri.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>The carcinoma is strictly confined to the cervix (extension to the corpus would be disregarded)</td>
</tr>
<tr>
<td>IA</td>
<td>Invasive carcinoma which can be diagnosed only by microscopy, with deepest invasion ≤5 mm and largest extension ≥7 mm</td>
</tr>
<tr>
<td>IA1</td>
<td>Measured stromal invasion of ≤3.0 mm in depth and extension of ≤7.0 mm</td>
</tr>
<tr>
<td>IA2</td>
<td>Measured stromal invasion of &gt;3.0 mm and not &gt;5.0 mm with an extension of not &gt;7.0 mm</td>
</tr>
<tr>
<td>IB</td>
<td>Clinically visible lesions limited to the cervix uteri or pre-clinical cancers greater than stage IA*</td>
</tr>
</tbody>
</table>

**IB1** Clinically visible lesion ≤4.0 cm in greatest dimension

- the lower third of the vagina
- Without parametrial invasion
- IIA1 Clinically visible lesion ≤4.0 cm in greatest dimension
- IIA2 Clinically visible lesion >4 cm in greatest dimension
- IIB With obvious parametrial invasion

**Stage III**
The tumor extends to the pelvic wall and/or involves lower third of the vagina and/or causes hydronephrosis or non-functioning kidney **

- IIIA Tumor involves 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

**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 of the growth to adjacent organs
- IVB Spread to distant organs

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Less radical surgery

IA2

IB1, 3 cm
Less radical surgery

IA2

IB1, 3 cm
Less radical surgery

Conservative management of early stage cervical cancer: Is there a role for less radical surgery?

Kathleen M. Schmeler *, Michael Frumovitz, Pedro T. Ramirez

Department of Gynecologic Oncology, The University of Texas M.D. Anderson Cancer Center, 1155 Herman Pressler Drive, Houston, TX 77030, USA

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Low-risk criteria</th>
<th>N</th>
<th>Parametrial involvement in low-risk group (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinney [13]</td>
<td>1995</td>
<td>Squamous histology only, tumor &lt;2 cm, no LVSI*</td>
<td>83</td>
<td>0.0%</td>
</tr>
<tr>
<td>Covens [14]</td>
<td>2002</td>
<td>All histologies, tumor &lt;2 cm, DOI** &lt;10 mm, negative pelvic lymph nodes</td>
<td>536</td>
<td>0.6%</td>
</tr>
<tr>
<td>Stegeman [15]</td>
<td>2007</td>
<td>Squamous, adenocarcinoma, adenosquamous or clear cell histology, tumor &lt;2 cm, DOI** &lt;10 mm, no LVSI*, negative pelvic lymph nodes</td>
<td>103</td>
<td>0.0%</td>
</tr>
<tr>
<td>Wright [16]</td>
<td>2008</td>
<td>All histologies, tumor &lt;2 cm, no LVSI*, negative pelvic lymph nodes</td>
<td>270</td>
<td>0.4%</td>
</tr>
<tr>
<td>Frumovitz [19]</td>
<td>2009</td>
<td>Squamous, adenocarcinoma or adenosquamous histology, tumor &lt;2 cm, no LVSI*</td>
<td>125</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

*LVSI: lymphvascular space involvement
**DOI: depth of invasion

All retrospective data  N=1117  < 1%

Schmeler K et al. Gynecol Oncol 120:321, 2011
Less radical surgery

- All retrospective data
- No prospective randomized trials
The SHAPE Trial

Comparing radical hysterectomy and pelvic node dissection against simple hysterectomy and pelvic node dissection in patients with low risk cervical cancer

Chair: Marie Plante
Laval University, Quebec City

A CCTG Clinical Trials Group proposal for the Gynecological Cancer Inter Group (GCIG)
Low-risk cervical cancer as defined by:
- squamous cell, adenocarcinoma, adenosquamous carcinoma
- Stage IA2 and modified IB1
- < 10mm stromal invasion on LEEP/cone
- < 50% stromal invasion on MRI
- max dimension of ≤ 20 mm
- Grade 1-3 or not assessable

<table>
<thead>
<tr>
<th>RANDOMIZE</th>
<th>ARM 1 (Control) Radical Hysterectomy*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arm 2 (Experimental) Simple Hysterectomy*</td>
</tr>
</tbody>
</table>

* Regardless of treatment assignment, surgery will include pelvic lymph node dissection with optional sentinel lymph node (SN) mapping. If SN mapping is to be done, the mode is optional, but the laparoscopic approach is preferred.

Planned sample size: 700 (non-inferiority at 0.05 level with 80% power)
Less radical surgery

Perhaps radical surgery is NOT necessary is small volume lesions…
Less radical surgery

Simple Trachelectomy / Cone
Types of fertility sparing surgery

Fig. 1 Types of fertility-sparing surgery: A large cone, B1 simple trachelectomy, B2 endocervical loop, C vaginal radical trachelectomy and D abdominal radical trachelectomy or laparoscopic radical trachelectomy

Simple trachelectomy

25 year old woman G0
Very early cervical cancer
Minimal endocervical involvement
Simple trachelectomy
N=35
Nodes : negative except 2 with ITC
2/3 had NRD or in situ disease only
1 recurrence & death
25 pregnancies
  72% delivered > 36 weeks
Oncological outcomes after fertility-sparing surgery for cervical cancer: a systematic review

Enrica Bentivegna, Sebastien Gouy, Amandine Maulard, Cyrus Chargari, Alexandra Leary, Philippe Morice

<table>
<thead>
<tr>
<th>Simple tracheectomy or cone resection</th>
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<tbody>
<tr>
<td><strong>Series and case reports</strong></td>
</tr>
<tr>
<td>Number series or case reports*</td>
</tr>
<tr>
<td>Number of patients</td>
</tr>
<tr>
<td>Patients excluded†</td>
</tr>
<tr>
<td><strong>Tumour characteristics</strong></td>
</tr>
<tr>
<td>Stage†</td>
</tr>
<tr>
<td>IA</td>
</tr>
<tr>
<td>IB1</td>
</tr>
<tr>
<td>All</td>
</tr>
<tr>
<td>&gt;2 cm</td>
</tr>
<tr>
<td>IB2</td>
</tr>
<tr>
<td>IIA</td>
</tr>
<tr>
<td><strong>Tumour type</strong></td>
</tr>
<tr>
<td>Squamous-cell carcinoma</td>
</tr>
<tr>
<td>Adenocarcinoma</td>
</tr>
<tr>
<td>Other, mixed, or unknown</td>
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<tr>
<td>LVS1 positive</td>
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<tr>
<td><strong>Oncological outcomes</strong></td>
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<tr>
<td>Recurrent disease</td>
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<tr>
<td>Died from disease</td>
</tr>
<tr>
<td><strong>Fertility outcomes</strong></td>
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<tr>
<td>Pregnancies</td>
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<td>Fetal loss (trimester 1 or 2)</td>
</tr>
<tr>
<td>Preterm delivery</td>
</tr>
<tr>
<td><strong>Pregnancy rate‡</strong></td>
</tr>
</tbody>
</table>
Review

Management of low-risk early-stage cervical cancer: Should conization, simple trachelectomy, or simple hysterectomy replace radical surgery as the new standard of care?

Pedro T. Ramirez a,⁎, Rene Pareja b, Gabriel J. Rendón b, Carlos Millan c, Michael Frumovitz a, Kathleen M. Schmeler a

a Department of Gynecologic Oncology and Reproductive Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA
b Department of Gynecologic Oncology, Instituto de Cancerología Las Américas, Medellín, Colombia
c Department of Gynecology, Hospital Quiron, Murcia, Spain
Less radical surgery

Meticulous/careful patient selection is of utmost importance

- Preoperative pelvic MRI
- Expert pathology review
Preoperative pelvic MRI
Expert pathological assessment

-of Diagnostic LEEP and cone
  - Several LEEPs...
-of Margins status
-of Several pieces
-Is the lesion truly < 2cm and < 10mm deep ?
-of Danger is to perform conservative treatment in more extensive cervical cancer and end-up with cancer recurrence...
Conization in Early Stage Cervical Cancer

Pattern of Recurrence in a 10-Year Single-Institution Experience

Federica Tomao, PhD, MD,*† Matteo Maruccio, MD,*† Eleonora Petra Preti, MD,* Sara Boveri, MD,* Enzo Ricciardi, PhD, MD,*† Vanna Zanagnolo, MD,* and Fabio Landoni, PhD, MD*

N=54; 76% IB1
6/7 recurrence were local (cervix)

TABLE 2. Recurrences

<table>
<thead>
<tr>
<th>Patient Number</th>
<th>Age*</th>
<th>Stage*</th>
<th>Histotype</th>
<th>LVSI</th>
<th>DFS, mts</th>
<th>Site of Recurrence</th>
<th>Tests Positive</th>
<th>Treatment</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>37</td>
<td>IA2</td>
<td>SCC</td>
<td>-</td>
<td>56</td>
<td>Cervix</td>
<td>SCC clinical examination biopsy</td>
<td>RT + BT</td>
<td>NED</td>
</tr>
<tr>
<td>2†</td>
<td>33</td>
<td>IB1</td>
<td>SCC</td>
<td>+</td>
<td>21</td>
<td>Cervix</td>
<td>Papanicolaou test biopsy</td>
<td>RS + CTRT + BT</td>
<td>NED</td>
</tr>
<tr>
<td>3</td>
<td>31</td>
<td>IB1</td>
<td>SCC</td>
<td>-</td>
<td>13</td>
<td>Cervix</td>
<td>Papanicolaou test biopsy</td>
<td>Re-coniz</td>
<td>NED</td>
</tr>
<tr>
<td>4</td>
<td>37</td>
<td>IB1</td>
<td>Adk</td>
<td>-</td>
<td>14</td>
<td>Cervix</td>
<td>HPV test Papanicolaou test biopsy, PET, MRI, MRI</td>
<td>Re-coniz + CTRT + BT</td>
<td>NED</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>IB1</td>
<td>Adk</td>
<td>-</td>
<td>22</td>
<td>Cervix</td>
<td>Papanicolaou test biopsy, PET, US, MRI, MRI</td>
<td>Reconiz</td>
<td>NED</td>
</tr>
<tr>
<td>6</td>
<td>34</td>
<td>IA2</td>
<td>Adenosq</td>
<td>-</td>
<td>21</td>
<td>Cervix</td>
<td>Papanicolaou test biopsy</td>
<td>CT</td>
<td>NED</td>
</tr>
<tr>
<td>7</td>
<td>34</td>
<td>IB1</td>
<td>SCC focal</td>
<td>-</td>
<td>14</td>
<td>Pelvic lymph node</td>
<td>MRI, US, Biopsy</td>
<td>CT</td>
<td>ED</td>
</tr>
</tbody>
</table>

*After surgery she underwent adjuvant chemotherapy with carboplatin (AUC4) and paclitaxel 90 mg/mL on days 1 to 8 every 3 weeks.
†Margins of resection were positive.

Adenosq, adenosquamous; Adk, adenocarcinoma; CT, chemotherapy; CTRT, chemoradiation; DFS, disease free survival; MRI, magnetic resonance imaging; mts, months; NED, not evident disease; RT, radiotherapy; SCC, squamous cell carcinoma; US, ultrasonographic examination.
Follow-up

❖ Post trachelectomy / cone
   ❖ Need for PROLONGED FOLLOW-UP
   ❖ Experienced gyn-onc / colposcopists
   ❖ HPV testing and vaccination
60 studies: 17 cone and 43 RT
N=2854 patients; 375 cone and 2479 RT
Stage IB1: 44% cone vs 80% RT
Recurrence rate:
- Stage IA: 0.4% vs 0.7%
- Stage IB1: 0.6% vs 2.3%

CONCLUSION: Fertility-sparing treatment including CON or RT for eCC is feasible and carefully selected women can preserve fertility and achieve pregnancy resulting in live births. **CON seems to result in better pregnancy outcomes than RT with similar rates of recurrence and mortality.**
Review of 2777 patients; 944 pregnancies

Overall fertility rate: 55%

Pregnancy rate:
- Better after vaginal RT compared to abdominal RT

Prematurity (38%):
- Significantly lower after ST/Cone versus RT

Live birth rate: similar (70%)
Prospective trials

Concerv

GOG-278
ConCerv (G-GOC)

Cervical Cancer - Conservative Management

Cone/Simple Hysterectomy + SLN Only

Stage IA2-IB1 (<2 cm) LVSİ (-); SCC G1-3; ADK G1-2

Study Design: Prospective Phase II

Sponsor(s): None

Planned No. of patients: 100

Other important information: 14 Sites Overall

Primary: MD Anderson
PROTOCOL GOG-0278
EVALUATION OF PHYSICAL FUNCTION AND QUALITY OF LIFE (QOL) BEFORE AND AFTER NON-RADICAL SURGICAL THERAPY (EXTRA FASCIAL HYGSTERECTOMY OR CONE BIOPSY WITH PELVIC LYMPHADENECTOMY) FOR STAGE IA1 (LVSI+) AND IA2-IB1 (≤ 2CM) CERVICAL CANCER
NCI Version Date 07/10/2012

POINTS:  
PER CAPITA - 20  
MEMBERSHIP - 6

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ODETTE CANCER CENTER  
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TORONTO, ONTARIO M4N 3M5  
PHONE: (416) 480-4378  
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JILLIAN KNAZEK, RN  
UNIVERSITY HOPSITALS CASE MEDICAL CTR  
DEPT OF GYN ONCOLOGY  
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CLEVELAND, OH 44106  
216-844-8787  
FAX: 216-844-8596  
Email: jillian.knazek@UHhospitals.org
Women with IA1–IB1 (≤2cm) carcinoma of the cervix who have been consented for surgery will be approached for study participation and entered on study.

Conization with pelvic lymphadenectomy (fertility preservation) Group

Simple hysterectomy with pelvic lymphadenectomy (no wish for future fertility) Group

N=220

Medical Information/Physician Checklist:
Medical extraction form CTCAE v. 4.0 criteria

Preoperative Study Survey (15 min to complete):
Bladder and Bowel Function Items
Female Functioning Index & 2 PROMIS items
GCLQ – Gyn Cancer Lymphedema Questionnaire
Functional Assessment Cancer Therapy FACT-Cx
Impact of Events Scale (IES)
Conization Group only Reproductive Items (ICF & RCS)

Medical Information/Physician Checklist:
Medical extraction form CTCAE v. 4.0 criteria

Preoperative Study Survey (15 min to complete):
Bladder and Bowel Function Items
Female Functioning Index & 2 PROMIS items
GCLQ – Gyn Cancer Lymphedema Questionnaire
Functional Assessment Cancer Therapy FACT-Cx
Impact of Events Scale (IES)
Simple Trachelectomy-Cone

✿ Valuable less radical option for women with LOW-RISK small volume disease
  - < 2 cm

✿ Patient selection critical

✿ Long-term follow-up essential
Conclusion

☞ Change FIGO classification?
  □ Sub-divide stage IB1
    • a: < 2 cm
    • b: ≥ 2 cm < 4 cm
## Table 1: FIGO staging of cancer of the cervix uteri (2018).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>The carcinoma is strictly confined to the cervix (extension to the uterine corpus should be disregarded)</td>
</tr>
<tr>
<td>IA</td>
<td>Invasive carcinoma that can be diagnosed only by microscopy, with maximum depth of invasion &lt; 5 mm²</td>
</tr>
<tr>
<td>IA1</td>
<td>Measured stromal invasion &lt; 3 mm in depth</td>
</tr>
<tr>
<td>IA2</td>
<td>Measured stromal invasion ≥ 3 mm and &lt; 5 mm in depth</td>
</tr>
<tr>
<td>IB</td>
<td>Invasive carcinoma with measured deepest invasion ≥ 5 mm (greater than Stage IA), lesion limited to the cervix uteri</td>
</tr>
<tr>
<td>IB1</td>
<td>Invasive carcinoma ≥ 5 mm depth of stromal invasion, and &lt; 2 cm in greatest dimension</td>
</tr>
<tr>
<td>IB2</td>
<td>Invasive carcinoma ≥ 2 cm and &lt; 4 cm in greatest dimension</td>
</tr>
<tr>
<td>IB3</td>
<td>Invasive carcinoma ≥ 4 cm in greatest dimension</td>
</tr>
<tr>
<td>II</td>
<td>The carcinoma invades beyond the uterus, but has not extended onto the lower third of the vagina or to the pelvic wall</td>
</tr>
<tr>
<td>II A</td>
<td>Involvement limited to the upper two-thirds of the vagina without parametrial involvement</td>
</tr>
<tr>
<td>II A1</td>
<td>Invasive carcinoma &lt; 4 cm in greatest dimension</td>
</tr>
<tr>
<td>II A2</td>
<td>Invasive carcinoma ≥ 4 cm in greatest dimension</td>
</tr>
<tr>
<td>IIB</td>
<td>With parametrial involvement but not up to the pelvic wall</td>
</tr>
<tr>
<td>III</td>
<td>The carcinoma involves the lower third of the vagina and/or extends to the pelvic wall and/or causes hydronephrosis or nonfunctioning kidney and/or involves pelvic and/or para-aortic lymph nodes</td>
</tr>
<tr>
<td>III A</td>
<td>The carcinoma involves the lower third of the vagina, with no extension to the pelvic wall</td>
</tr>
<tr>
<td>III B</td>
<td>Extension to the pelvic wall and/or hydronephrosis or nonfunctioning kidney (unless known to be due to another cause)</td>
</tr>
<tr>
<td>III C</td>
<td>Involvement of pelvic and/or para-aortic lymph nodes, irrespective of tumor size and extent (with r and p notations)</td>
</tr>
<tr>
<td>III C1</td>
<td>Pelvic lymph node metastasis only</td>
</tr>
<tr>
<td>III C2</td>
<td>Para-aortic lymph node metastasis</td>
</tr>
<tr>
<td>IV</td>
<td>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)</td>
</tr>
<tr>
<td>IVA</td>
<td>Spread to adjacent pelvic organs</td>
</tr>
<tr>
<td>IVB</td>
<td>Spread to distant organs</td>
</tr>
</tbody>
</table>

*ITCs and micromets excluded*
Evolution in the management of cervical cancer

- 1900: Wertheim Abd Rad Hyst
- 1980: TP LN dissection
- 1990: Vaginal Rad Trachelectomy
- 2000: SLN mapping
- 2010: Simple Trach & SN?
- 2010: Cone & SN?
- 2010: Neoadjuvant Chemotx?
- 2010: Abdominal Rad Trachelectomy
- 2010: Laparoscopic Rad Trachelectomy
- 2010: Robotic Rad Trachelectomy