Role of Surgery in Cervical Cancer & Research Questions

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Cervix Cancer Education Symposium, January 2016, Bangkok, Thailand
Role of surgery in cervical cancer

• Diagnosis: for early, microscopic lesion
• Primary treatment: for early stage
• Surgical staging: for advanced stage
• Treatment for recurrence

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Diagnostic role for early cervical cancer

Cold knife conization (CKC)

Large loop excision of transformation zone (LLETZ)/ Loop electrosurgical excision procedure (LEEP)

www.healthtap.com
Stage IA1 \((\leq 7\text{mm, } \leq 3\text{mm inv})\)

- **Conization**
  - Margin -ve → **Extrafascial hysterectomy**
  - Margin +ve
    - LVSI +ve
      - Mx as IA1 vs IA2 ?
    - Repeat cone
      - Observe

Chiang Mai U 2006
59.7\% residual Dz
15.5\% invasive

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Stage IA2 \((\leq 7\text{mm, } \leq 5\text{mm inv})\)

- Modified Radical Hysterectomy + Pelvic Lymphadenectomy
- Simple Hysterectomy ? + Pelvic Lymphadenectomy - SHAPE
- Radical Trachelectomy + Pelvic Lymphadenectomy
- Conization ? + Lap. Pelvic Lymphadenectomy
- Para-aortic LN Sampling ? Sentinel LN Mapping ?

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Stage IA2 ($\leq$7mm, $\leq$5mm inv)

Modified Radical Hysterectomy

Radical Trachelectomy


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Stage IB1/IIA1 (7mm – 4cm)

Radical Hysterectomy + Pelvic Lymphadenectomy

Lap/Robot vs Abdominal ? – LACC (MD Anderson & Queensland)

Radical Trachelectomy + Pelvic Lymphadenectomy
(IB1, prefer < 2cm)

Para-aortic LN Sampling ? Sentinel LN Mapping ?
Berek & Hacker’s Gynecologic Oncology. 6th Ed 2015

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Ultrastaging

SENTICOL / AGO


- Detection rate 89.2% [86.5-91.6%]
- Sensitivity 90% [88-92%], frozen section 59.9% [52.5-66.9%]
- Small tumor size & lower stage ensure lowest false negative rates.

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Stage IB2 (>4cm)

- CCRT
- RHND → Tailored adjuvant RT
- CCRT → adjuvant hysterectomy
- NACT → RHND
Stage IB2 (>4cm)

**CCRT**

**RHND → Tailored adjuvant RT**

**1 RCT Landoni 1997**

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<thead>
<tr>
<th></th>
<th>RT</th>
<th>RHND</th>
<th>P</th>
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<tbody>
<tr>
<td>5yr OS</td>
<td>83 %</td>
<td>83 %</td>
<td>NS</td>
</tr>
<tr>
<td>5yr DFS</td>
<td>74 %</td>
<td>74 %</td>
<td>NS</td>
</tr>
<tr>
<td>Recur</td>
<td>26 %</td>
<td>25 %</td>
<td>NS</td>
</tr>
<tr>
<td>Pelvic recur</td>
<td>30 %</td>
<td>20 %</td>
<td>NA</td>
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<tr>
<td>Sev. morbid</td>
<td>12 %</td>
<td>28 %</td>
<td>0.0004</td>
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Accurate staging
Preserve ov function
**Stage IB2 (>4cm)**

- **CCRT → adjuvant hysterectomy**

**GOG 2003**
- Pelvic relapse 5 yr
- RT: 27%
- RT → TAH: 14%
- OS < - >

**GOG 2007 (RT vs CCRT) → Sx**
- Residual: 57% 47%
- 2yr OS: 79% 89%
- 2yr DFS: 69% 81%
Stage IB2 (>4cm)

CCRT

Kim 2013
Meta-analysis
Stages IB1-IIA
NACT vs Primary surgery
↓size, metastasis
<=-> OS

EORTC 55994
ongoing

NACT → RHND
Cost-effectiveness Analysis (Rocconi et al 2005)

**Stage IB2 (>4cm)**

- **RHND → Tailored adjuvant RT**: Most cost effective
- **CCRT**: $500,000/ additional survivor
- **NACT → RHND**: $2,200,000/ additional survivor

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Cervix Cancer Research Network

“Surgical Staging”

• 1RCT: Clinical vs Surgical: Lai CH. Gynecol Oncol 2003
  – Early termination (n=61): surg worse: HR relapse 3.13 [1.42-6.89](p=0.005), mortality 1.76 [0.81-3.79](p=0.150)

• Retrospective GOG 85+120+165: Gold MA. Cancer 2008 n=555
  – Radio worse: HR progress 1.35 [1.01-1.81], mortality 1.46 [1.08-1.99]

• Ongoing trials
  – GOG233/ACRIN6671: PET/CT vs lymphadenectomy
  – LiLACS (Lymphadenectomy in Locally Advanced Cervical cancer Study) Frumovitz M & Querleu D: PET/CT vs min. inv. extraperit. lymphadenectomy
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Management of Recurrent

Isolated localized pelvic recurrence

**Pelvic exenteration**

- 5-yr Survival: 20-64%
- Mortality: <5(0-16)%
- Major morbidity: 50%

https://en.wikipedia.org/wiki/Pelvic_exenteration

Small recurrence in cervix after RT

**Radical hysterectomy**

- 5-yr Survival: 25-84%
- Major morbidity: 31-75%

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Research questions

• Management of stage IA1 c LVSI
  – As IA1 or IA2 ?
• Less radical surgery in early stage
  – Primary lesion ? / Lymph nodes ?
• Sentinel LN Mapping ?
• Optimal management of stage IB2
  – Upfront CCRT / RHND / NACT ?
• Surgical staging in advanced stage ?