

Role of Surgery in Cervical Cancer & Research Questions

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Role of surgery in cervical cancer

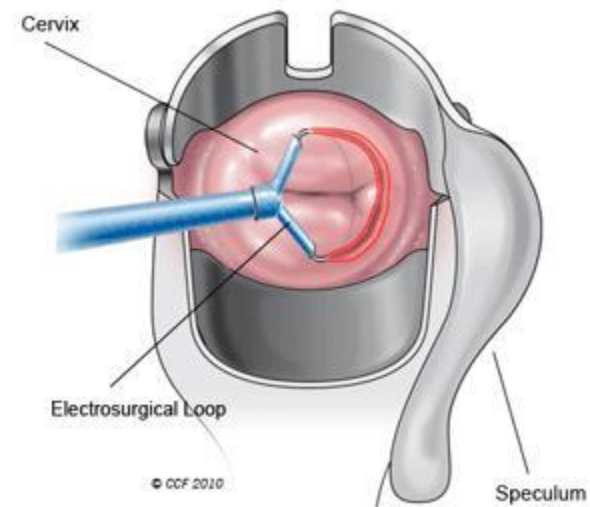
- **Diagnosis : for early, microscopic lesion**
- **Primary treatment : for early stage**
- **Surgical staging : for advanced stage**
- **Treatment for recurrence**

Diagnostic role for early cervical cancer

Cold knife conization (CKC)



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

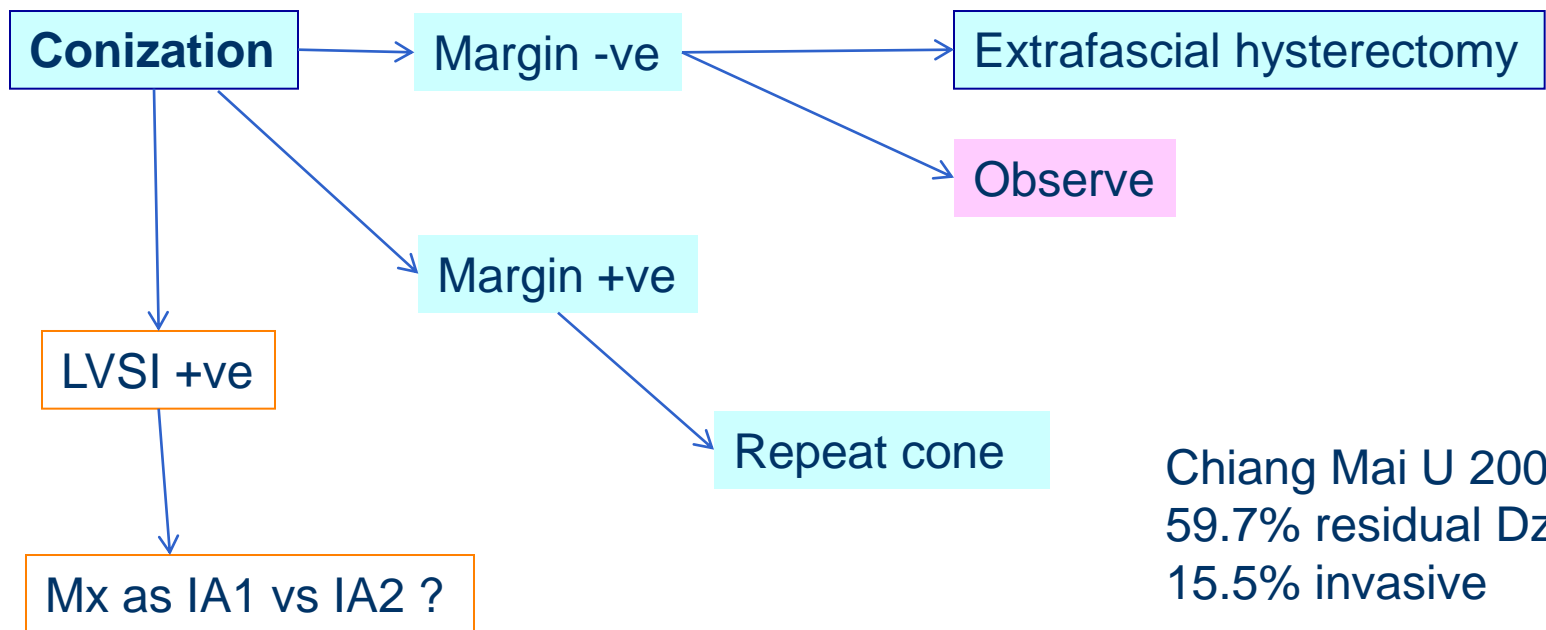


www.healthtap.com

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Stage IA1 (≤ 7 mm, ≤ 3 mm inv)



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

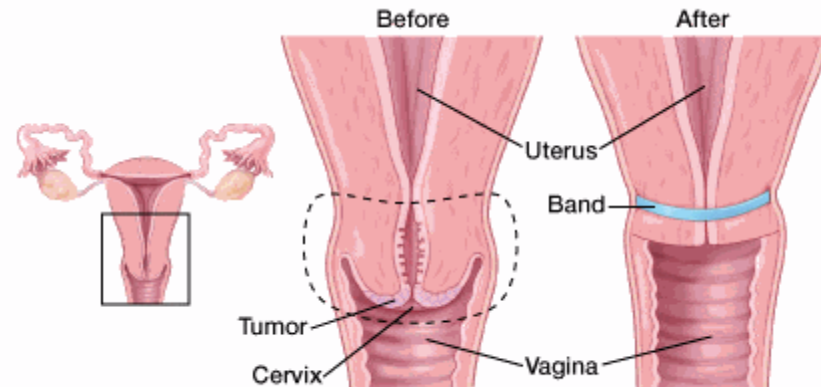
GYNECOLOGIC
CANCER INTERGROUP

An Organization of International Cooperative
Groups for Clinical Trials in Gynecologic Cancers

Modified Radical Hysterectomy



Radical Trachelectomy



<http://www.cancer.org/cancer/cervicalcancer/detailedguide/cervical-cancer-treating-surgery>

Cervix Cancer Education Symposium, January 2016, Bangkok, Thailand

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Stage IB1/IIA1 (7mm – 4cm)



Radical Hysterectomy + Pelvic Lymphadenectomy

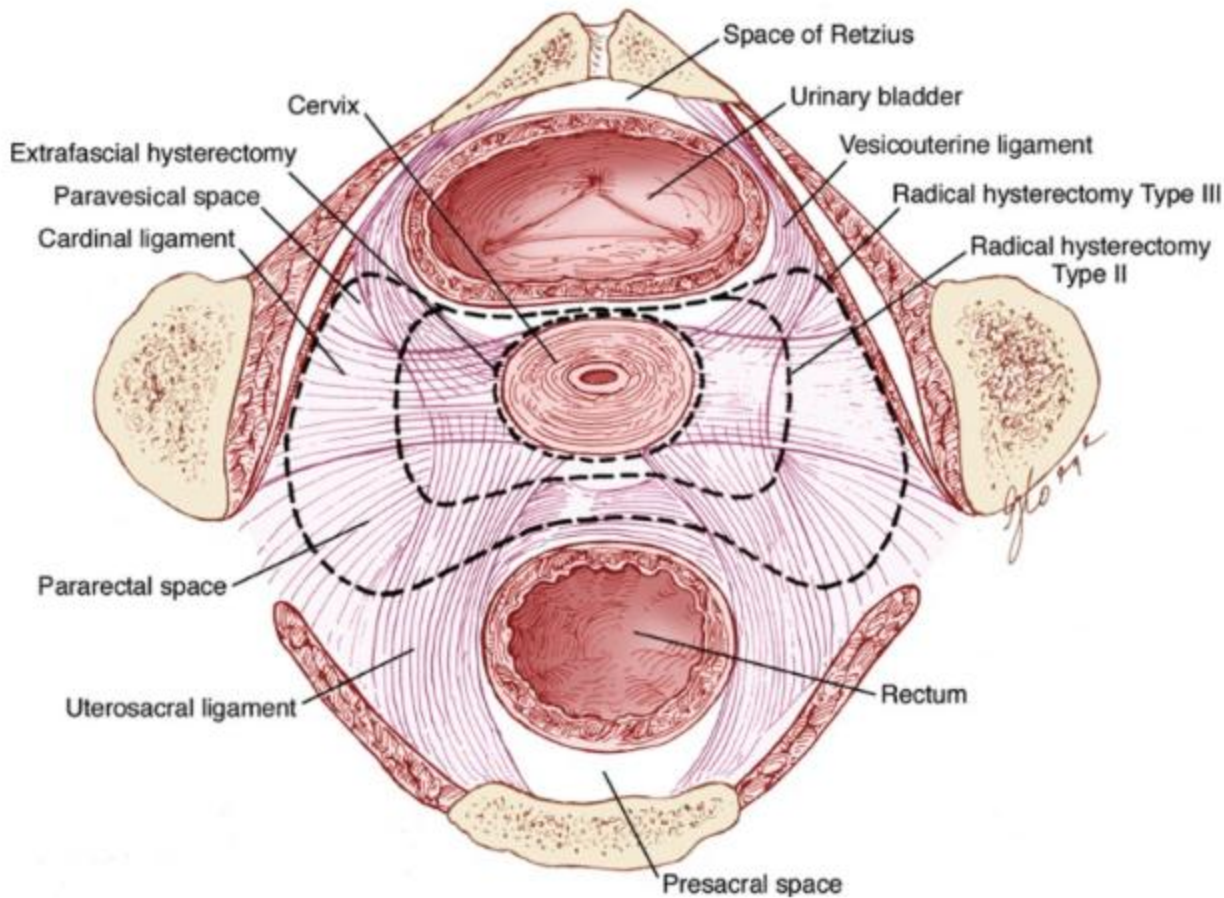
Lap/Robot vs Abdominal ? – LACC (MD Anderson&Queensland)

Radical Trachelectomy + Pelvic Lymphadenectomy

(IB1, prefer < 2cm)

Para-aortic LN Sampling ? Sentinel LN Mapping ?

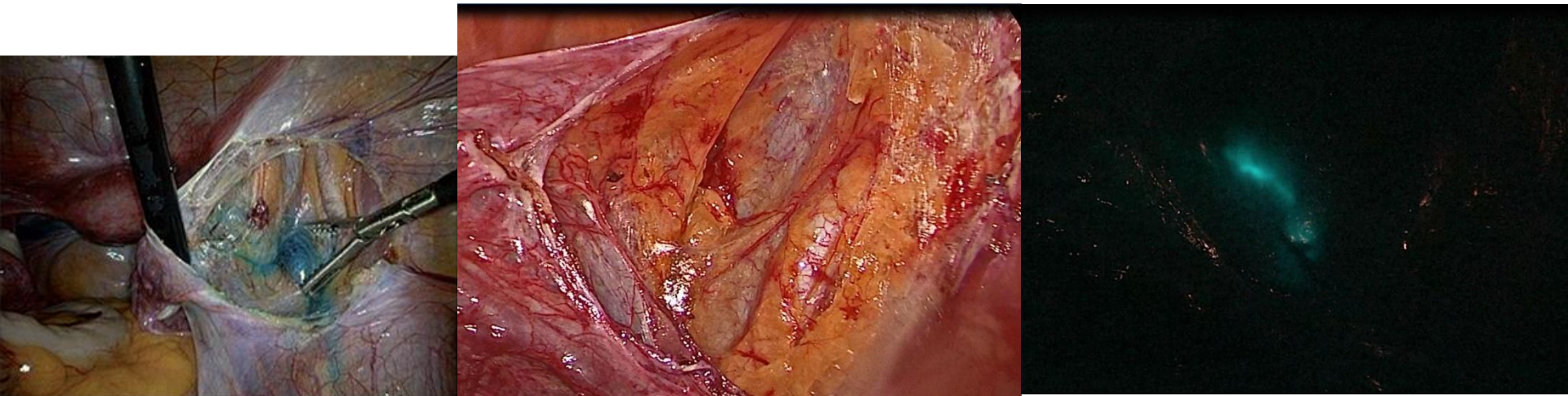
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Berek & Hacker's Gynecologic Oncology. 6th Ed 2015

Cervix Cancer Education Symposium, January 2016, Bangkok, Thailand

Gynecologic Cancer InterGroup Cervix Cancer Research Network Sentinel LN Mapping



Source: B. Y. Karlan, R. E. Bristow, A. J. Li: Gynecologic Oncology: Clinical Practice and Surgical Atlas
www.obgyn.mhmedical.com
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Lekskul N& Lertkhachonsuk A 2015

- Ultrastaging
- SENTICOL / AGO
- Metaanalysis (Kadkhodoyan S, et al. Eur J Surg Oncol 2015) 67 studies:
 - 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.

Cervix Cancer Education Symposium, January 2016, Bangkok, Thailand

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Stage IB2 (>4cm)



CCRT

RHND → Tailored adjuvant RT

CCRT → adjuvant hysterectomy

NACT → RHND

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Stage IB2 (>4cm)



CCRT

RHND → Tailored adjuvant RT

1 RCT Landoni 1997

	RT	RHND	P
5yr OS	83 %	83 %	NS
5yr DFS	74 %	74 %	NS
Recur	26 %	25 %	NS
Pelvic recur	30 %	20 %	NA
Sev. morbid	12 %	28 %	0.0004

Accurate staging
Preserve ov function

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Stage IB2 (>4cm)



CCRT

GOG 2003

Pelvic relapse 5 yr

RT 27%

RT→TAH 14%

OS < - >

CCRT → adjuvant hysterectomy

GOG 2007 (RT vs CCRT) → Sx

Residual	57%	47%
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2yr OS	79%	89%
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2yr DFS	69%	81%
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Stage IB2 (>4cm)



CCRT

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

EORTC 55994
ongoing

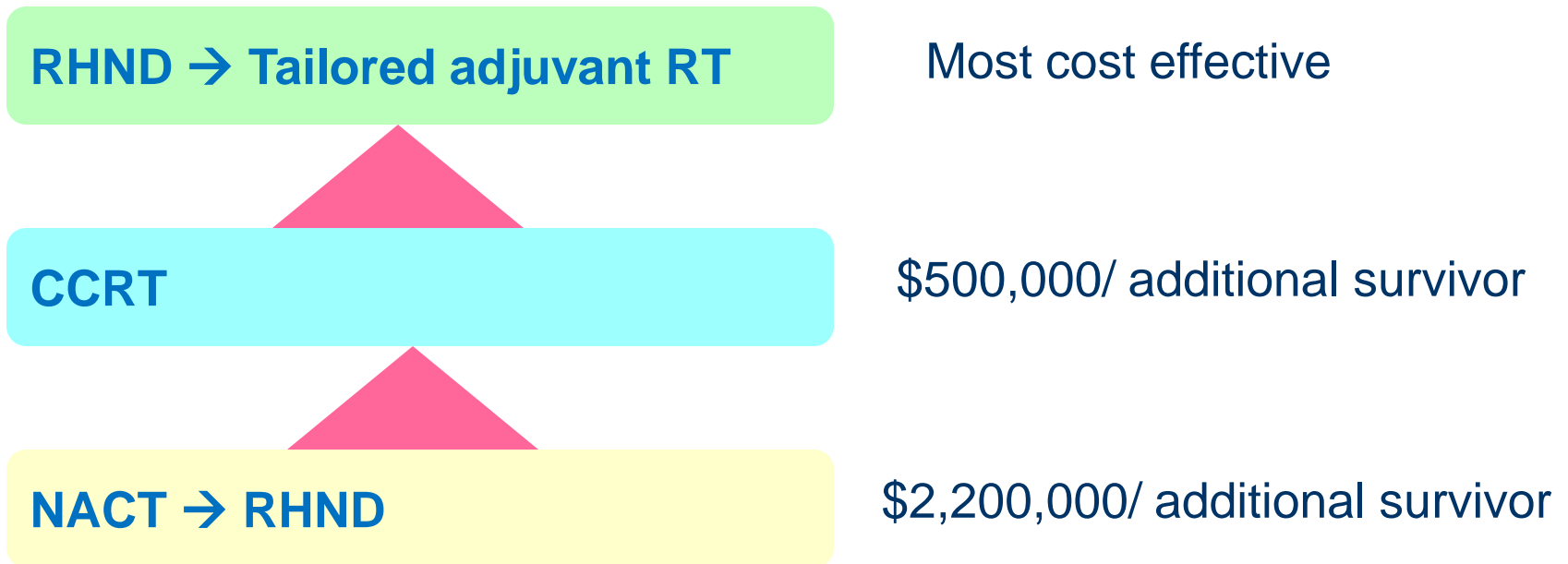
NACT → RHND

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Stage IB2 (>4cm)



Cost-effectiveness Analysis (Rocconi et al 2005)



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“Surgical Staging”



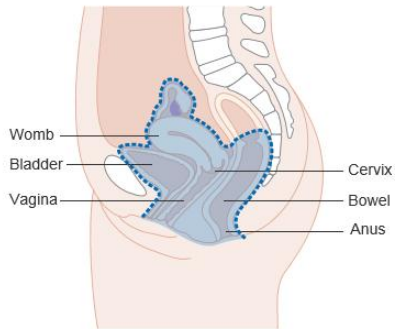
- 1RCT: Clinical vs Surgical: Lai CH. Gynecol Oncol 2003
 - Early termination (n=61): surg worse: HR relapse 3.13 [1.42-6.89](p=0.005), mortality 1.76 [0.81-3.79](p=0.150)
- Retrospective **GOG 85+120+165**: Gold MA. Cancer 2008 n=555
 - Radio worse: HR progress 1.35 [1.01-1.81], mortality 1.46 [1.08-1.99]
- 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



----- Area to be removed

Pelvic exenteration

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

Radical hysterectomy

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

IORT ?

Small recurrence in cervix after RT

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 ?