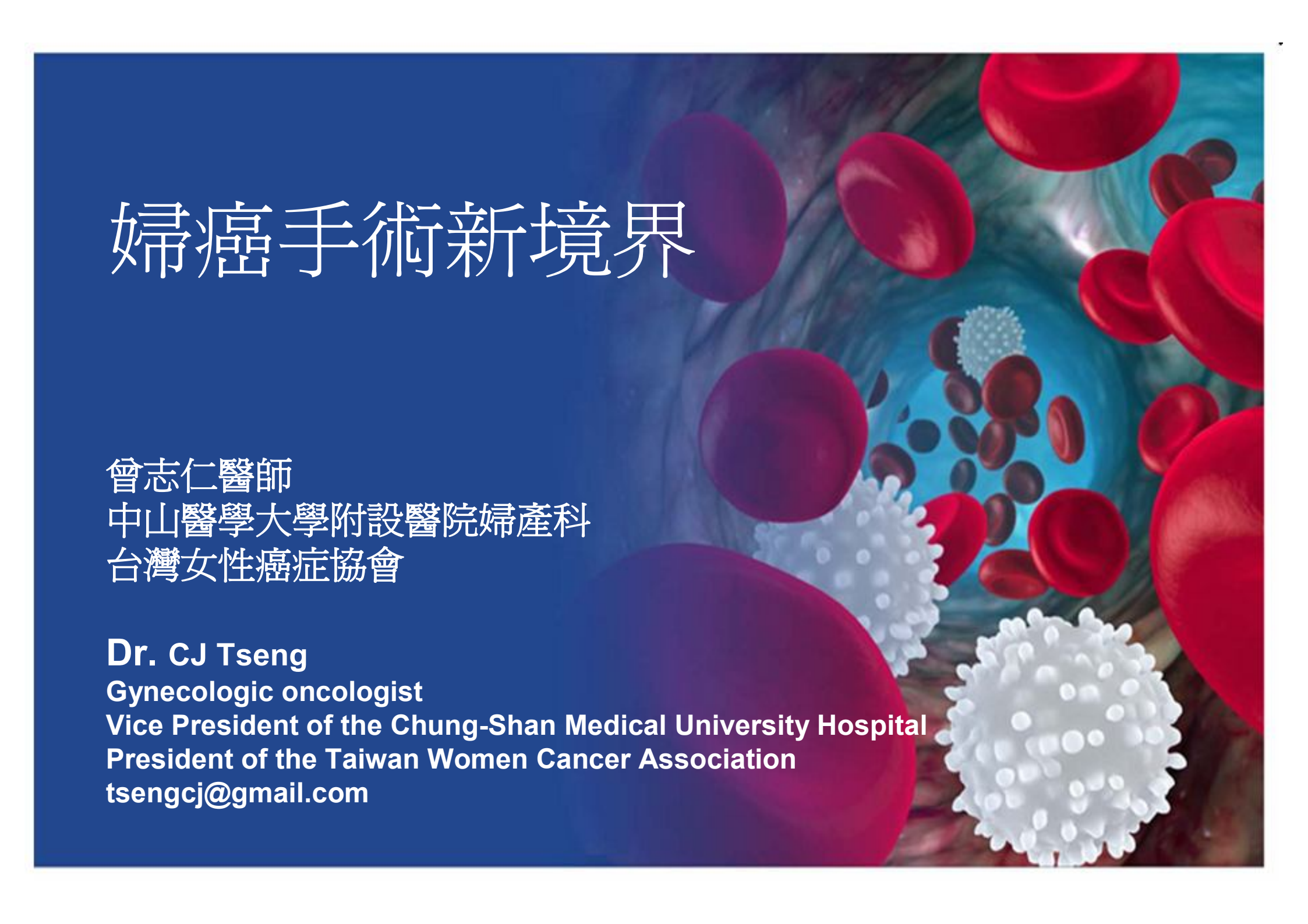


婦癌手術新境界

A microscopic view of blood cells and cancer cells. Large red blood cells are visible, along with smaller white blood cells and several white, irregularly shaped cancer cells with spiky surfaces.

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- 中山醫學大學附設醫院婦科主任
- 台灣女性癌症協會理事長

Specialty:

- 婦產科癌症腫瘤
- 電子病歷
- 實證醫學與醫療品質

-
- **【1】 1997年、1998年 台灣婦產科醫學會最佳論文獎 全國第一名。**
 - **【2】 2000年 台灣徐千田醫學論文獎 全國第一名。**
 - **【3】 1998、1999、2000、2001年國科會學術研究獎。**
 - **【4】 2005年 行政院醫療品質獎全國第一名。**
 - **【7】 2006年 醫策會醫療品質獎全國第一名。**
 - **【8】 2007年 國健局子宮頸癌預防篩檢品質獎全國第一名。**
 - **【9】 2008年 醫策會實證醫學獎全國第一名。**

婦癌治療新趨勢

根除治療

Advanced Operation
Chemotherapy
Radiation

保守治療

Preserved uterus
Fertility
Preserved function

預防醫學

Pap smear
HPV test
HPV vaccine

婦癌的治療演進

Disease treatment

Functional preserved

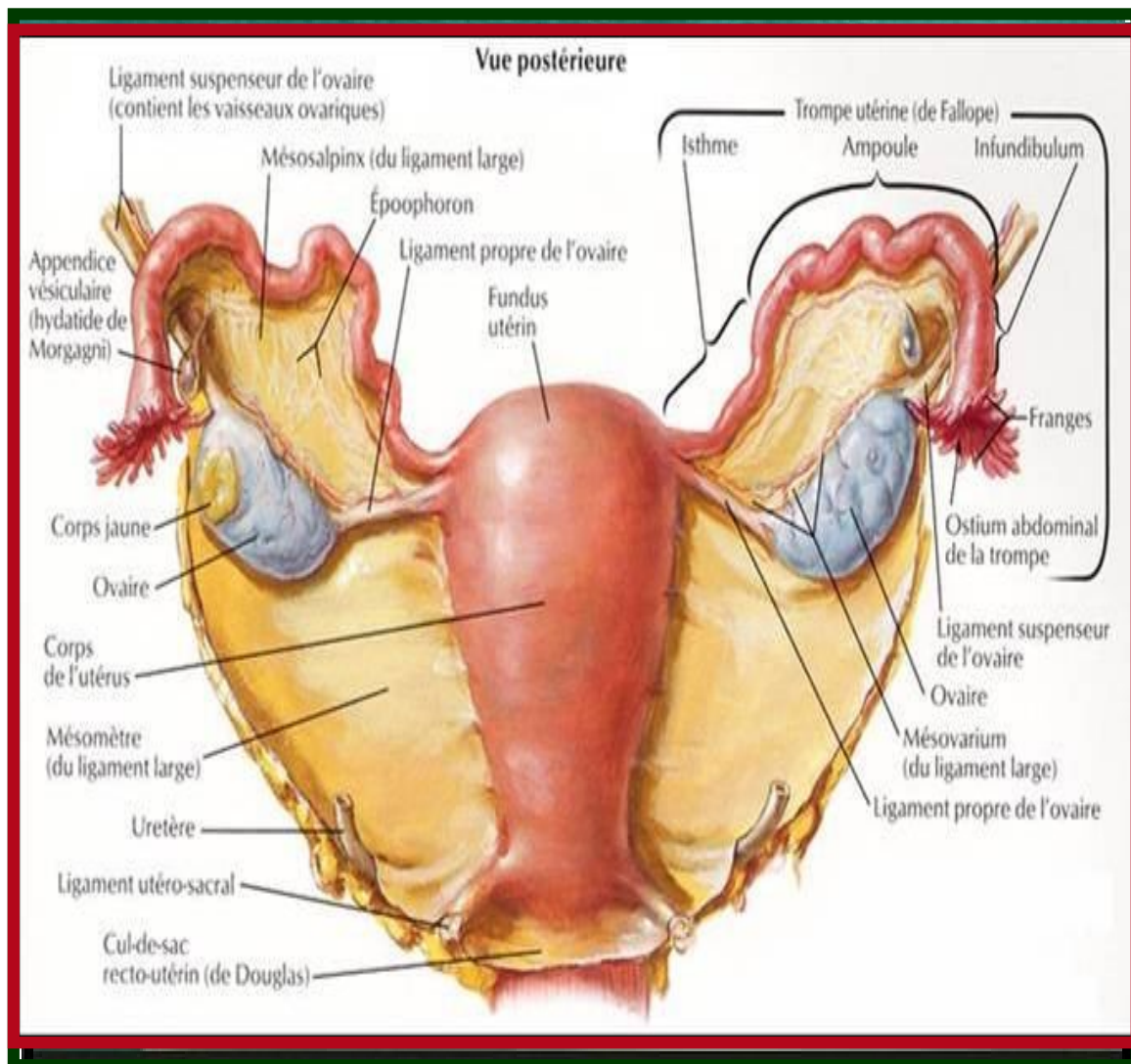
Organic preserved

Fertility preserved

Disease prevention

子宮頸癌 (Cervical cancer) 的治療

1



Consensus:

Radical hysterectomy

1. 全子宮根除手術
2. 雙側卵巢切除手術
3. 骨盆腔淋巴腺切除手術
4. 雙側輸卵管切除手術
5. 陰道部分切除手術

「手術」的醫療品質

Find a problem 婦癌手術常見的併發症



「手術」的醫療品質

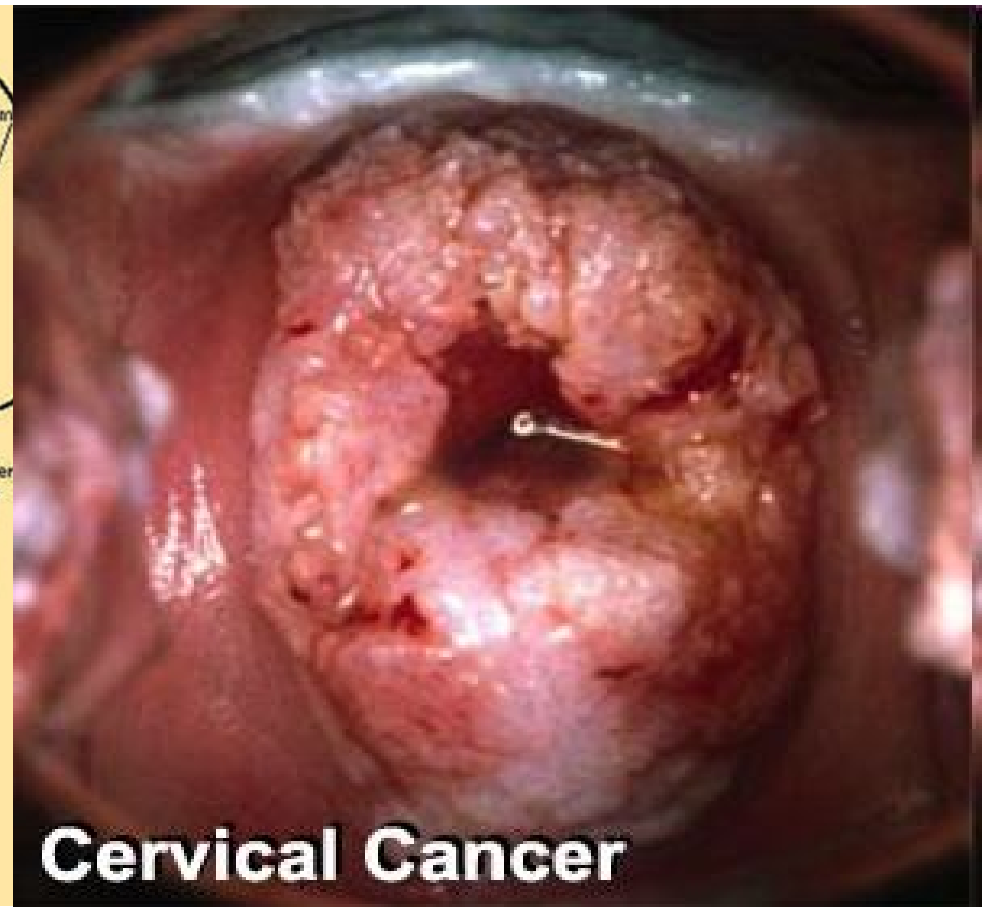
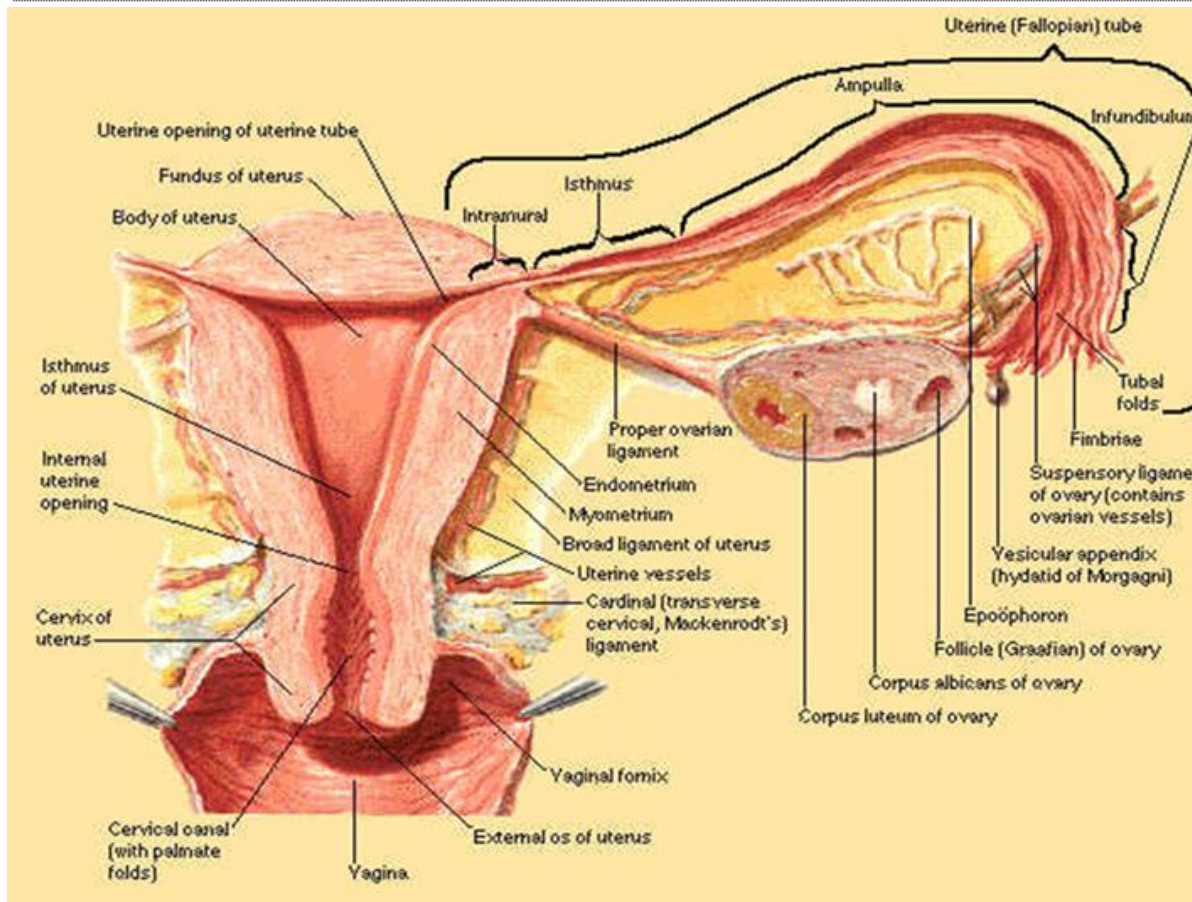
併發症發生的原因

1. 神經破壞
2. 組織纖維化
3. 器官切除
4. 骨盆腔底結構破壞

- 漏尿
- 尿失禁
- 下肢水腫
- 便秘
- 性功能障礙



子宮頸癌是女性健康重大的威脅



威脅生命、生育、性生活、排尿解便、性意象傷害

婦癌的治療演進

Disease treatment

Functional preserved

Organic preserved

Fertility preserved

Disease prevention

疾病與文化的變遷



Treatment for invasive cervical cancer



43% of invasive cervical
cancer diagnoses are in
women aged 45 years or
younger
—many of whom still wish to
have children.

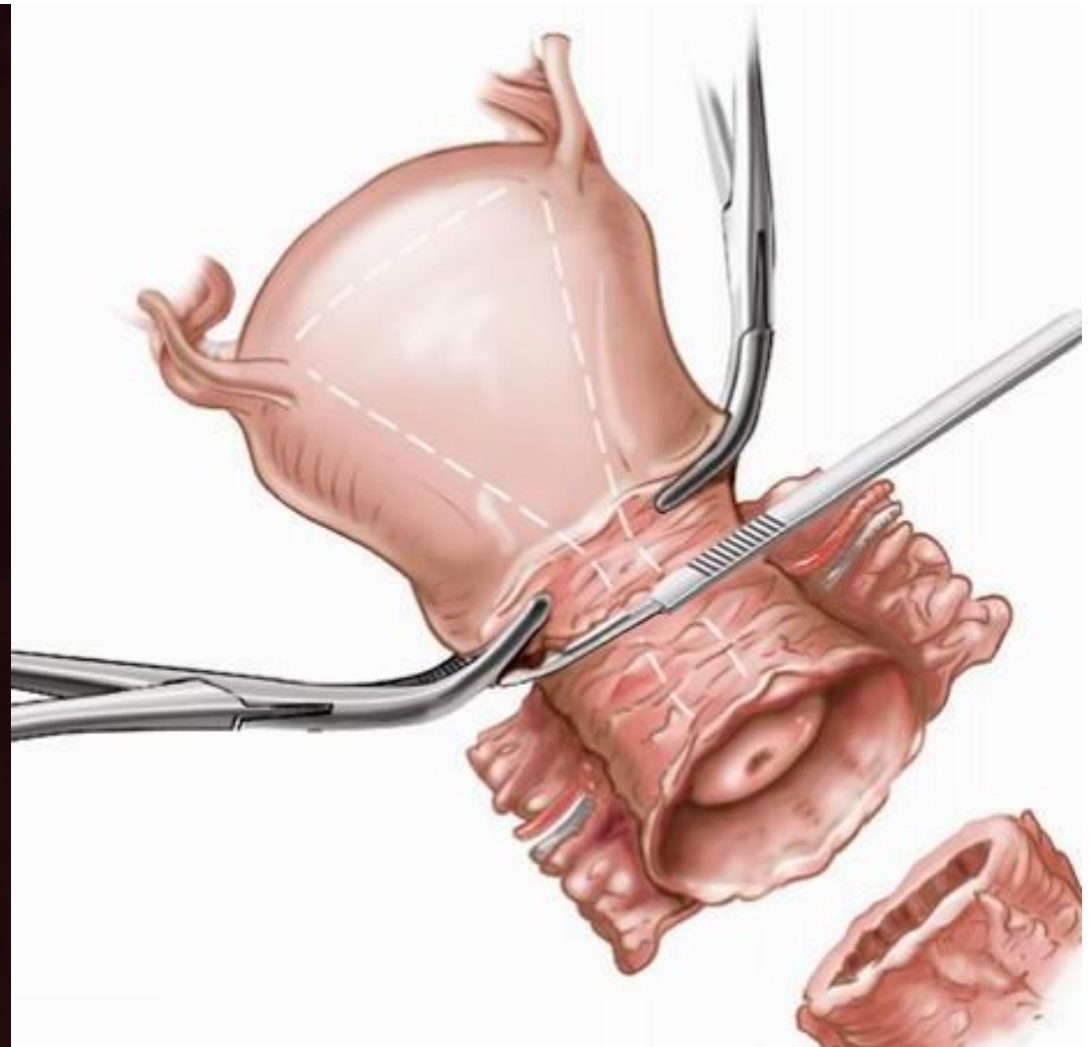
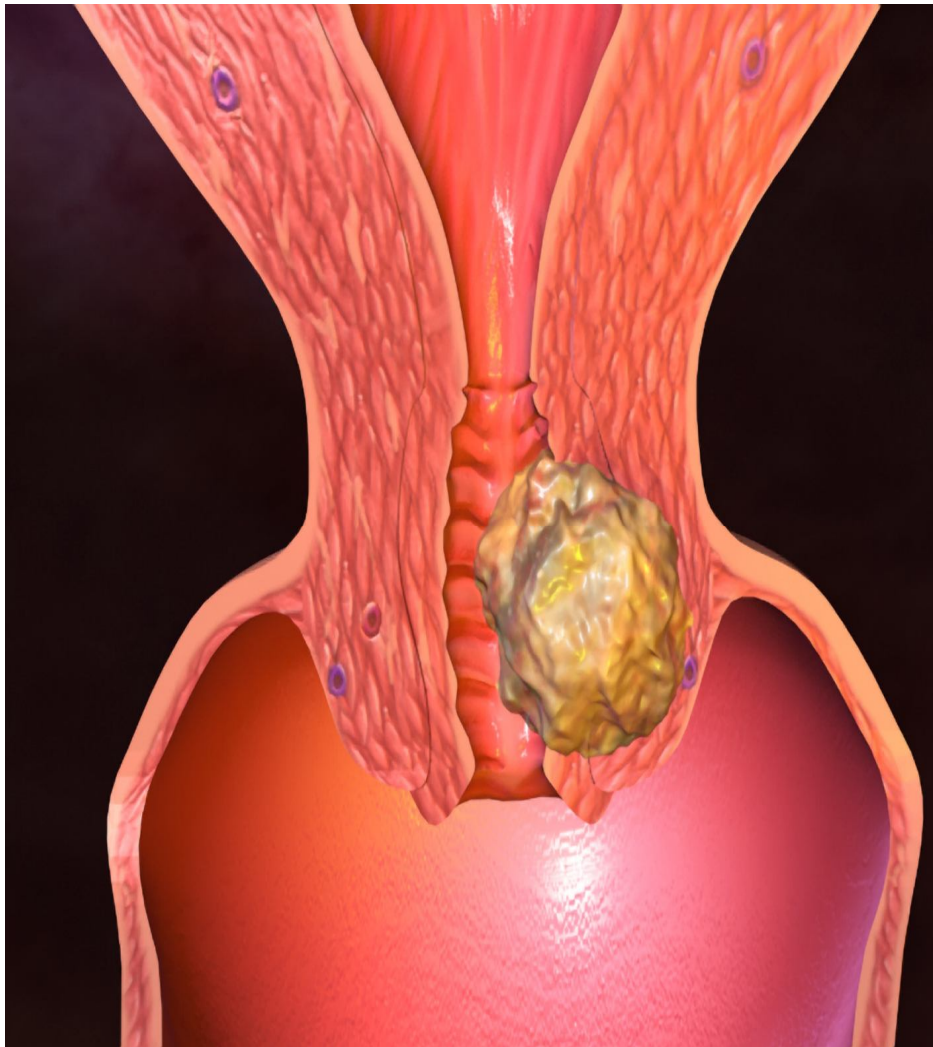
- Taiwan , 2008,DOH

Stage Ia1

Stage Ia2

Stage Ib

Treatment for invasive cervical cancer



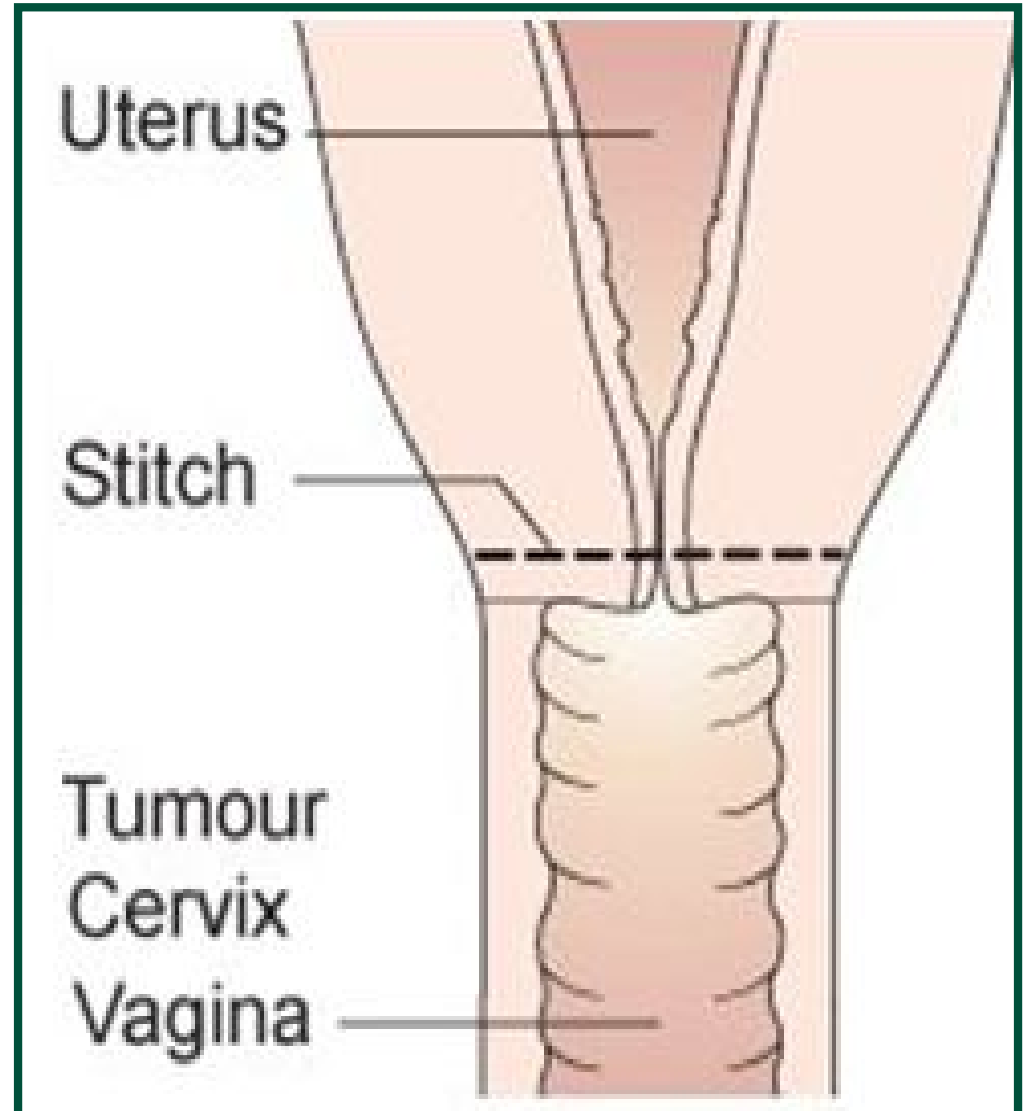
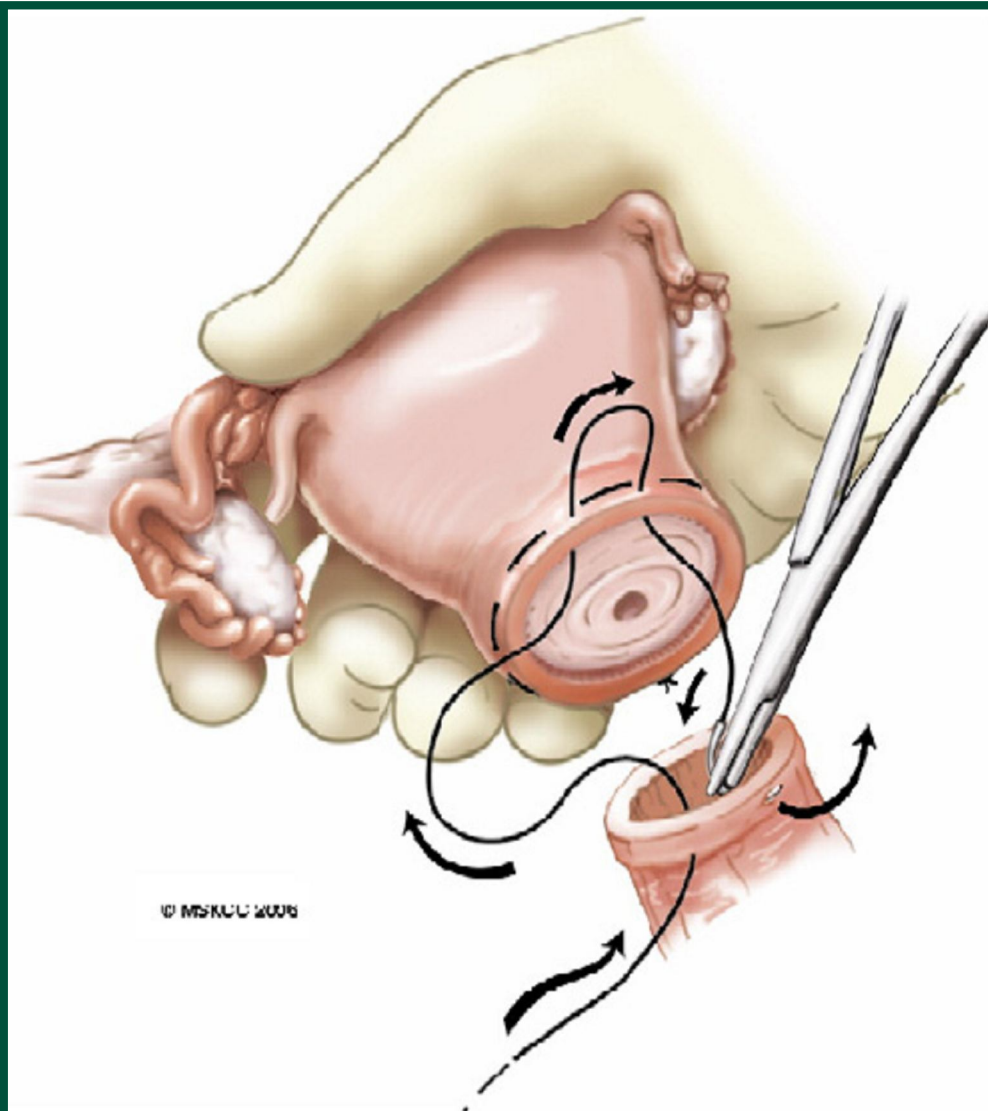


創新手術

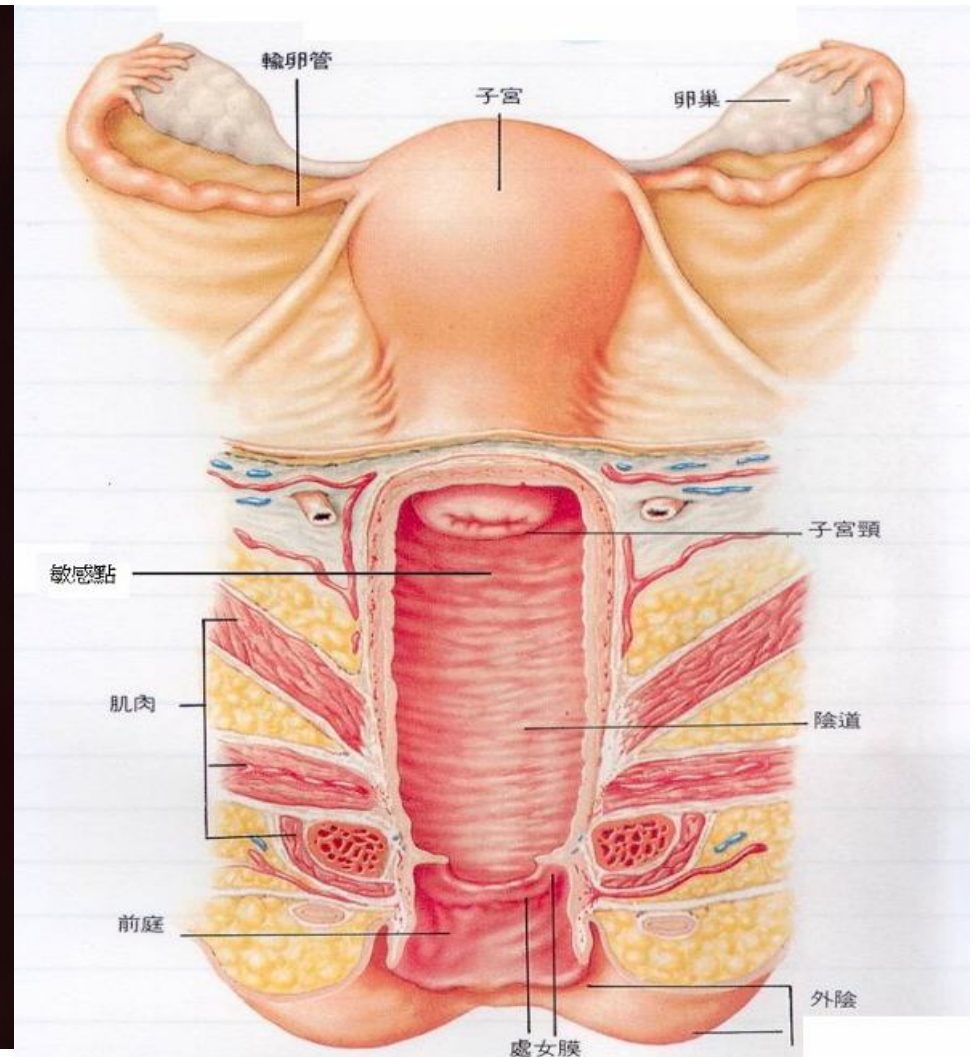
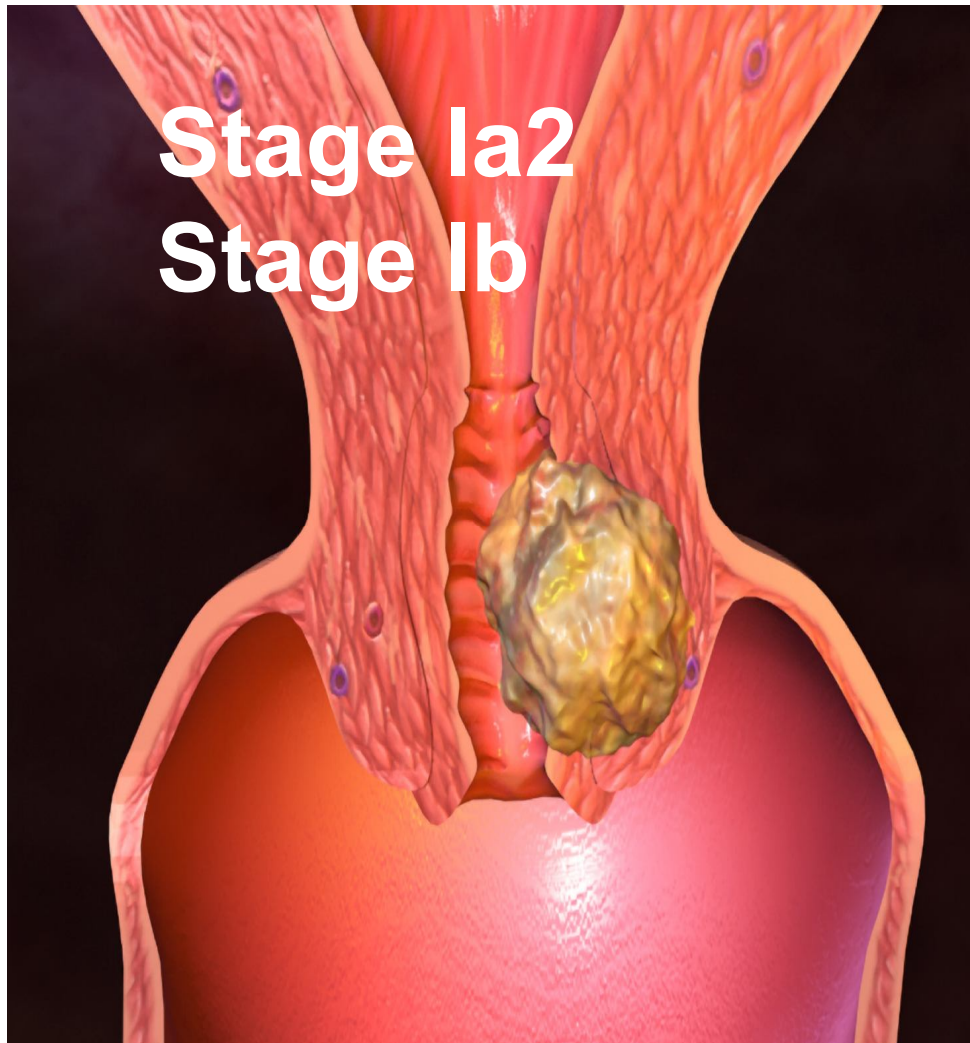
子宮頸癌的保守治療



保留子宮的子宮頸癌手術

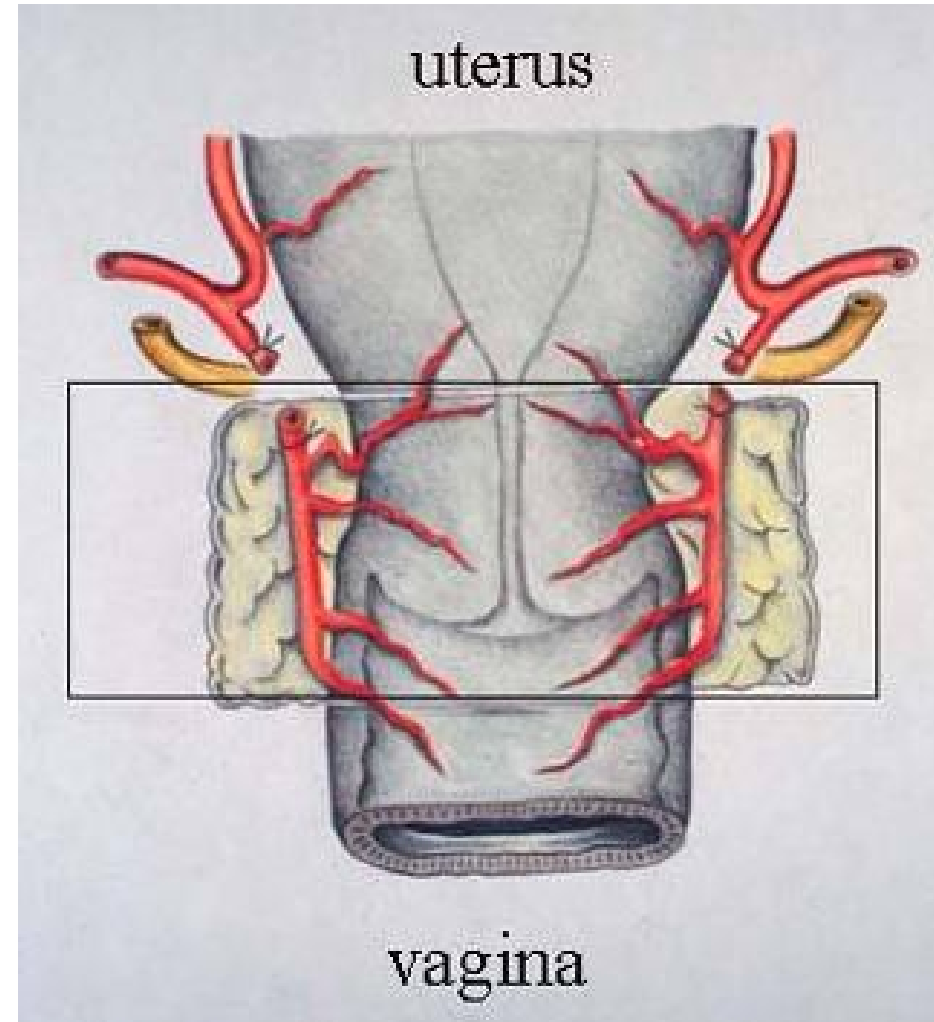
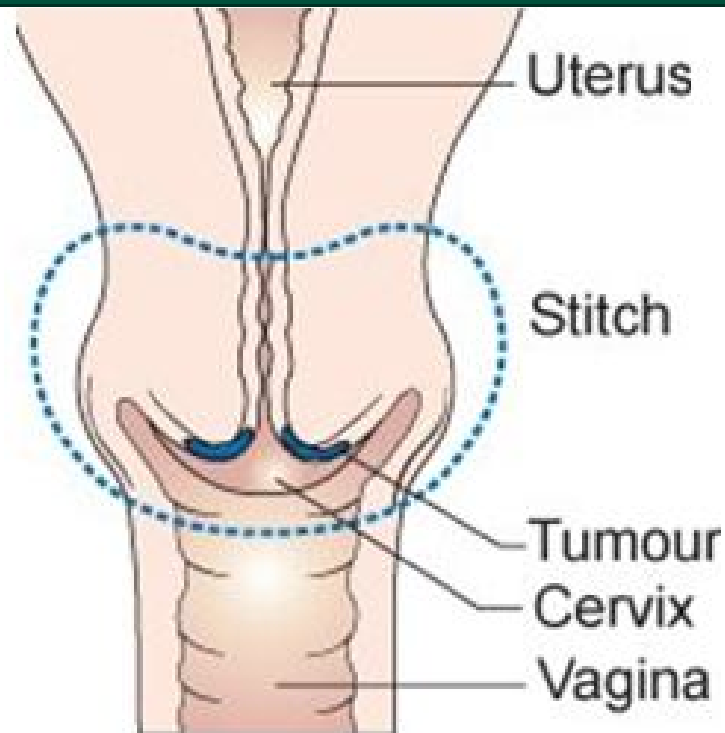


子宮頸侵襲癌周邊結構

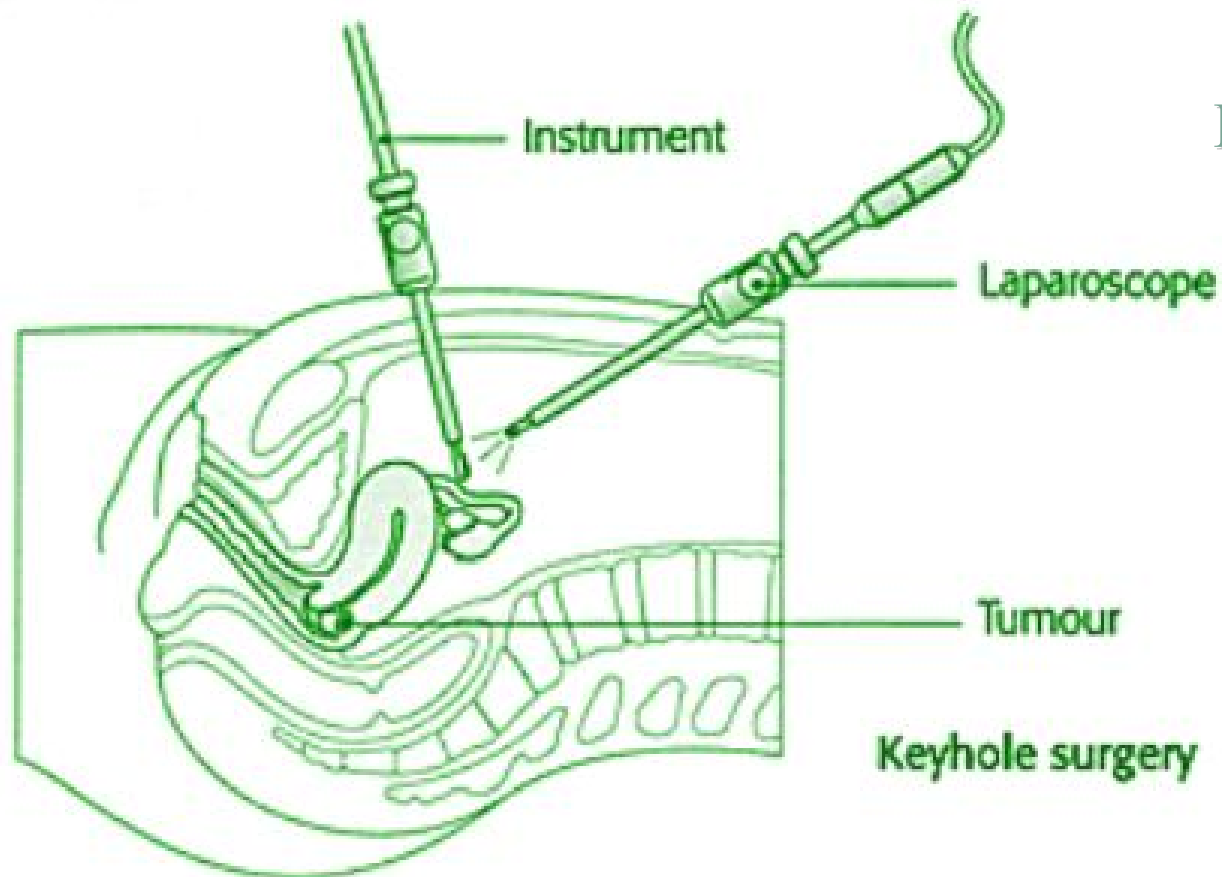


Radical Trachelectomy - Technique

1. *Abdominal approach*
2. *Vaginal approach *
3. *Extraperitoneal approach*



Pelvic Lymphadenectomy - Technique



Lymphadenectomy

1. *Laparoscopic*
2. *Intraperitoneal*
3. *Extraperitoneal*



Available online at www.sciencedirect.com



Gynecologic Oncology 94 (2004) 614–623

Gynecologic
Oncology

www.elsevier.com/locate/ygyno

Vaginal radical trachelectomy: an oncologically safe fertility-preserving surgery. An updated series of 72 cases and review of the literature

Marie Plante,^{a,*} Marie-Claude Renaud,^a Harel François,^b and Michel Roy^a

^a*Gynecologic Oncology Service, Centre Hospitalier Universitaire de Québec (CHUQ), L'Hôtel-Dieu de Québec, Laval University, Québec, Canada G1R-2J6*

^b*Epidemiology Department, Centre de Recherche, L'Hôtel-Dieu de Québec, Laval University, Québec, Canada*

Received 22 March 2004

Available online 2 July 2004

- From October **1991** to October 2003, we have planned 82 VRT in patients with early-stage cervical cancer (stages IA, IB, and IIA).
- Tumor size >2 cm was statistically significantly associated with a higher risk of recurrence (P =0.03).

Radical vaginal trachelectomy (RVT) combined with laparoscopic pelvic lymphadenectomy: Prospective multicenter study of 100 patients with early cervical cancer

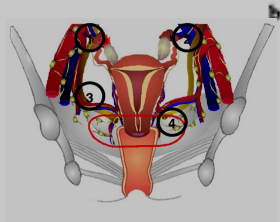
Hermann Hertel ^a, Christhardt Köhler ^b, Dorothee Grund ^b, Peter Hillemanns ^a, Marc Possover ^c,
Wolfgang Michels ^d, Achim Schneider ^{b,*}
for the German Association of Gynecologic Oncologists (AGO)

^a Department of Gynecology, Medical School Hanover, Germany

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^c Department of Gynecology, St. Elisabeth Hospital Hohenlind, Cologne, Germany

^d Department of Gynecology, Friedrich-Schiller-University Jena, Germany



Received 11 January 2006

Available online 11 May 2006

- Between March **1995** and November 2005, we intend to treat 108 patients with cervical cancer (TNM stage 1A1, L1 n = 18, 1A2, n = 21, 1B1 n = 69) by RVT.
- The median follow-up time was 29 (1–128) months.
- Three (3%) recurrences occurred in 100 patients treated with RVT.
- The projected 5-year recurrence-free and overall survival rates were 97% and 98%.

When is Surgery Appropriate ??

- **Young woman / Fertility sparing**
- **Small lesion <2 cm**
- **FIGO stage :Ia2~IB1**
- **No uncorrectable Infertility disease**
- **Retroperitoneal LN : negative**
- **No adjuvant RT**

Early cervical cancer - Radical Trachelectomy

Available online at www.sciencedirect.com

Gynecologic Oncology 112 (2009) 73–77

Gynecologic
Oncologywww.elsevier.com/locate/ygyno

Radical vaginal versus abdominal trachelectomy for stage IB1 cervical cancer: A comparison of surgical and pathologic outcomes

Margaret H. Einstein^a, Kay J. Park^b, Yukio Sonoda^a, Jeanne Carter^c, Dennis S. Chi^a,
Richard R. Barakat^a, Nadeem R. Abu-Rustum^{a,*}

^a Gynecology Service, Department of Surgery, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Box 261, New York, NY 10065, USA

^b Department of Pathology, Memorial Sloan-Kettering Cancer Center, New York, NY 10065, USA

^c Department of Psychiatry and Behavioral Sciences, Memorial Sloan-Kettering Cancer Center, New York, NY 10065, USA

Received 11 June 2008

Available online 29 October 2008

- Between 12/2001 and 7/2007, 43 adult patients with FIGO stage IB1 cervical cancer underwent surgery with the intent to perform a fertility-sparing radical trachelectomy. VRT was attempted in 28 patients (65%) and ART in 15 patients (35%).
- Parametrial nodes were detected in 8 (57.3%) of the ART specimens ($P=0.0002$).

Abdominal radical trachelectomy as a fertility-sparing procedure in women with early-stage cervical cancer in a series of 61 women

Hiroshi Nishio^a, Takuma Fujii^{a,*}, Kaori Kameyama^b, Nobuyuki Susumu^a, Masaru Nakamura^a,
Takashi Iwata^a, Daisuke Aoki^a

Gynecologic Oncology

A total of 61 women were followed up for a median of 27 months (range: one month – 79 months).

There were six recurrences (9.8%);

None of the recurrences occurred in patients with a tumor diameter of < 20 mm

L.T. Gien, A. Covens / Gynecologic Oncology 117 (2010) 350–357

Does radical trachelectomy influence uterine blood supply?

Petra Klemm^a, Roberto Tozzi^b, Christhardt Köhler^a, Hermann Hertel^a, Achim Schneider^{c,*}

^aDepartment of Gynecology of the Friedrich Schiller University Jena, Germany

^bDepartment of Gynecology, St. Bartholomew's Hospital, London, UK

^cDepartment of Gynecology, Charité Universitätsmedizin, Berlin, Germany

Received 13 August 2004

Available online 18 November 2004

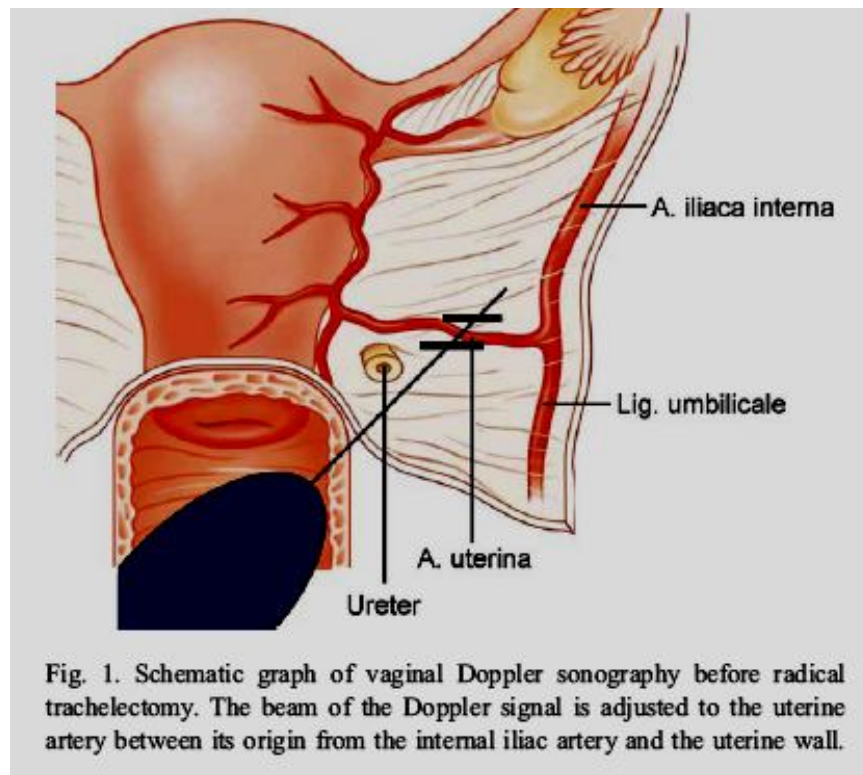


Fig. 1. Schematic graph of vaginal Doppler sonography before radical trachelectomy. The beam of the Doppler signal is adjusted to the uterine artery between its origin from the internal iliac artery and the uterine wall.

Uterine blood supply after radical trachelectomy is similar as control group (health women).

Uterine blood supply after radical trachelectomy

Age and value of RI of 14 healthy women in the control group

Number	Age	Contraception	RI right	RI left
1	18	oral contraception	0.77	0.74
2	23	oral contraception	0.89	0.85
3	23	oral contraception	0.44	0.66
4	23	oral contraception	0.74	0.71
5	23	oral contraception	0.89	0.86
6	25	oral contraception	0.85	0.78
7	23	none	0.74	0.54
8	22	oral contraception	0.83	0.81
9	24	oral contraception	0.83	0.78
10	25	oral contraception	0.82	0.78
11	23	oral contraception	0.75	0.77
12	22	oral contraception	0.75	0.79
13	25	oral contraception	0.62	0.56
14	26	oral contraception	0.83	0.76

Uterine blood supply after radical trachelectomy

Patient data, histology, and value of RI preoperatively and postoperatively of 14 patients who underwent radical trachelectomy and laparoscopic pelvic lymphadenectomy

No.	Age	Cervical length		Lymph nodes Positive/total	Histology	BMI	RI right pre	RI right post	RI left pre	RI left post
		Pre	Post (mm)							
1	31	25	10	0/29	Squamous pT1a1 L1 V0 R0	22.3	0.86	0.58	0.85	0.58
2	34	21	12	0/24	Adeno pT1b1 L0 V0 R0	21.3	0.8	0.85	0.73	0.85
3	33	28	14	0/35	Squamous pT1a2 L0 V0 R0	20.3	0.51	0.65	0.78	0.82
4	33	18	9	0/17	Adeno pT1b1 L0 V0 R0	21.3	0.79	0.72	0.75	0.69
5	37	28	16	0/14	Squamous pT1a2 L0 V0 R0	21.9	0.75	0.68	0.71	0.58
6	32	25	17	0/19	Adeno pT1a2 L0 V0 R0	33.9	0.86	0.72	0.77	0.62
7	30	25	12	0/18	Squamous pT1a2 L1 V0 R0	22.3	0.82	0.85	0.75	0.83
8	30	19	11	0/30	Adeno pT1b1 L0 V1 R0	22.3	0.79	0.81	0.68	0.7
9	34	18	13	0/34	Squamous pT1a1 L1 V0 R0	20.3	0.58	0.7	0.62	0.68
10	32	22	12	0/19	Squamous pT1b L0 V0 R0	20.9	0.74	0.66	0.58	0.62
11	35	31	14	0/30	Squamous pT1b1 L0 V0 R0	22.3	0.73	0.56	0.81	0.57
12	34	15	8	0/34	Squamous pT1a2 L1 V0 R0	22.9	0.82	0.68	0.88	0.67
13	36	34	11	0/19	Squamous pT1b1 L0 V0 R0	18.3	0.74	0.85	0.77	0.66
14	36	20	9	0/23	Adeno pT1b1 L0 V0 R0	29.3	0.88	0.53	0.76	0.58

Pre, preoperatively; post, postoperatively.

What about following pregnancy?

- **Pregnancy rate ?**
- **Miscarriage ?**
- **Premature labour ?**
- **Caesarean Section ?**

THE LANCET

Fertility-sparing surgery in patients with cervical cancer

Lukas Rob, Petr Skapa, Helena Robova

Lancet, July 8, 2010 , Lukas Rob. et al.

There are several types of fertility saving procedures that can be done in patients with cervical cancer, which differ in terms of surgical approach and extent of paracervical resection. This review assesses oncological and pregnancy results after different procedures. The oncological results of vaginal radical trachelectomies (VRT) and abdominal radical trachelectomies (ART) are similar for tumours less than 2 cm in size, and are now considered safe surgical procedures. Oncological outcomes of VRT and ART in tumours larger than 2 cm are also identical, but the results cannot be considered satisfactory. Preliminary findings of less radical procedures (ie, deep cone and simple trachelectomy) in patients with tumours less than 2 cm, and negative sentinel and other pelvic lymph nodes, are comparable with the results of VRT and ART. Downstaging tumours larger than 2 cm by neoadjuvant chemotherapy is still an experimental procedure and will need multicentre cooperation to verify its oncological safety. Pregnancy results vary statistically with the different methods.

Early cervical cancer - Radical Trachelectomy

Obstetric Outcome after Radical Trachelectomy

- 43% of patients subsequently attempted to get pregnant
- 70% of these became pregnant
 - 21% first trimester miscarriage
 - 8% second trimester miscarriage
 - 21% gave birth between 24 and 36 weeks
 - 50% gave birth after 36 weeks

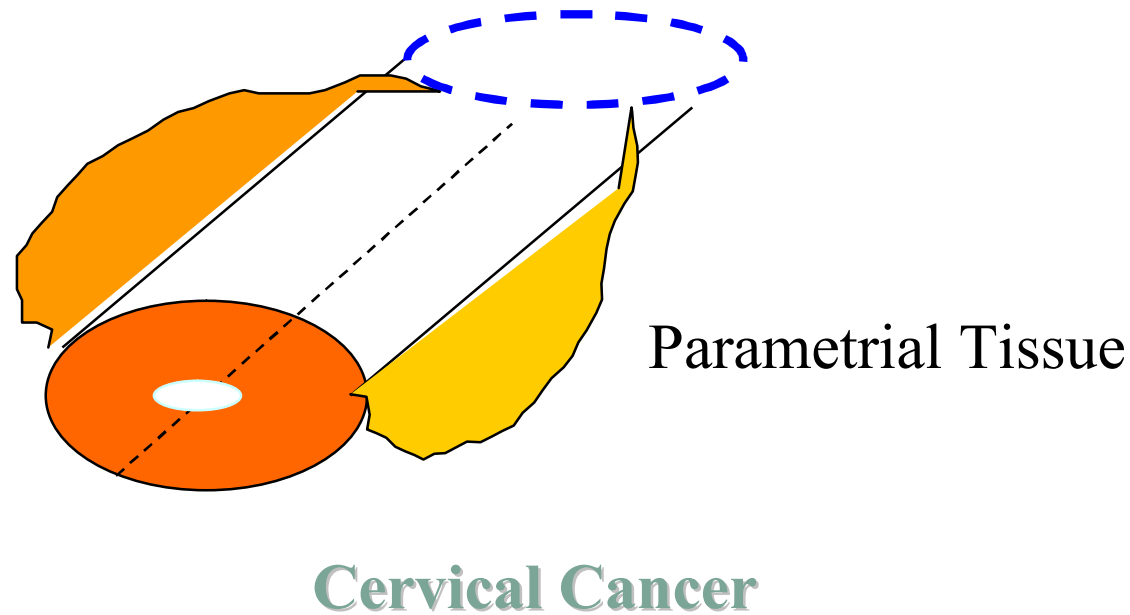
Radical Trachelectomy

Oncological Outcomes of Radical Vaginal Trachelectomy

- 520 cases
- Median age 31
- Median duration of follow-up 48 months (1-176)
- Included 12% of cases with tumours >2cms
- 4.2% recurrence rate
- 2.8% death rate

Post Radical Trachelectomy

Cervical Circlage is option



Early cervical cancer - Radical Trachelectomy

Complications After Radical Trachelectomy

- Dysmenorrhoea – 24%
- Dysplastic smears – 24%
- Irregular or intermenstrual bleeding – 17%
- Problems with cerclage sutures – 14%
- Excessive vaginal discharge – 14%
- Isthmic stenosis – 10%
- Amenorrhoea – 7%

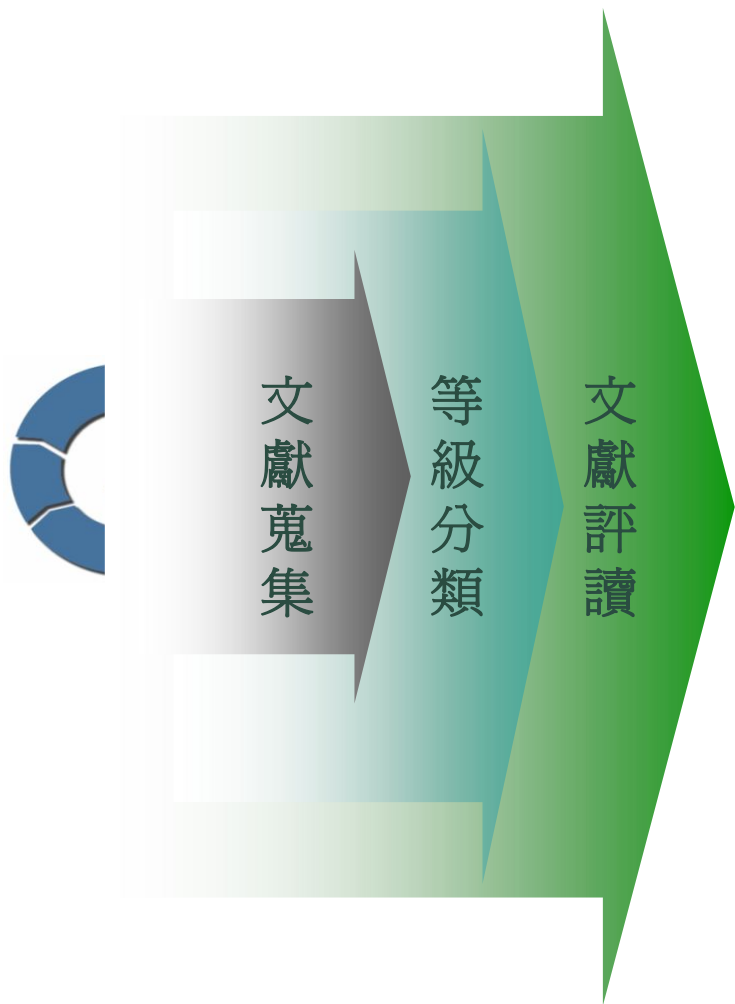
倫理與性別議題

Review of sexuality, partners, and family after Cancer .



證據搜尋與證據解讀

Search Evidence and Clinical Appraise



Patient	Cervical Cancer
Intervention	Traditional operation
Comparison	New surgical technique Conservative surgery
Outcome	Complications Disease free survival Cost-effective

文獻等級	篇數	References
Review	2	[19-20]
Randomized	2	[21-22]
Case control	3	[23-25]

Early cervical cancer - Radical Trachelectomy

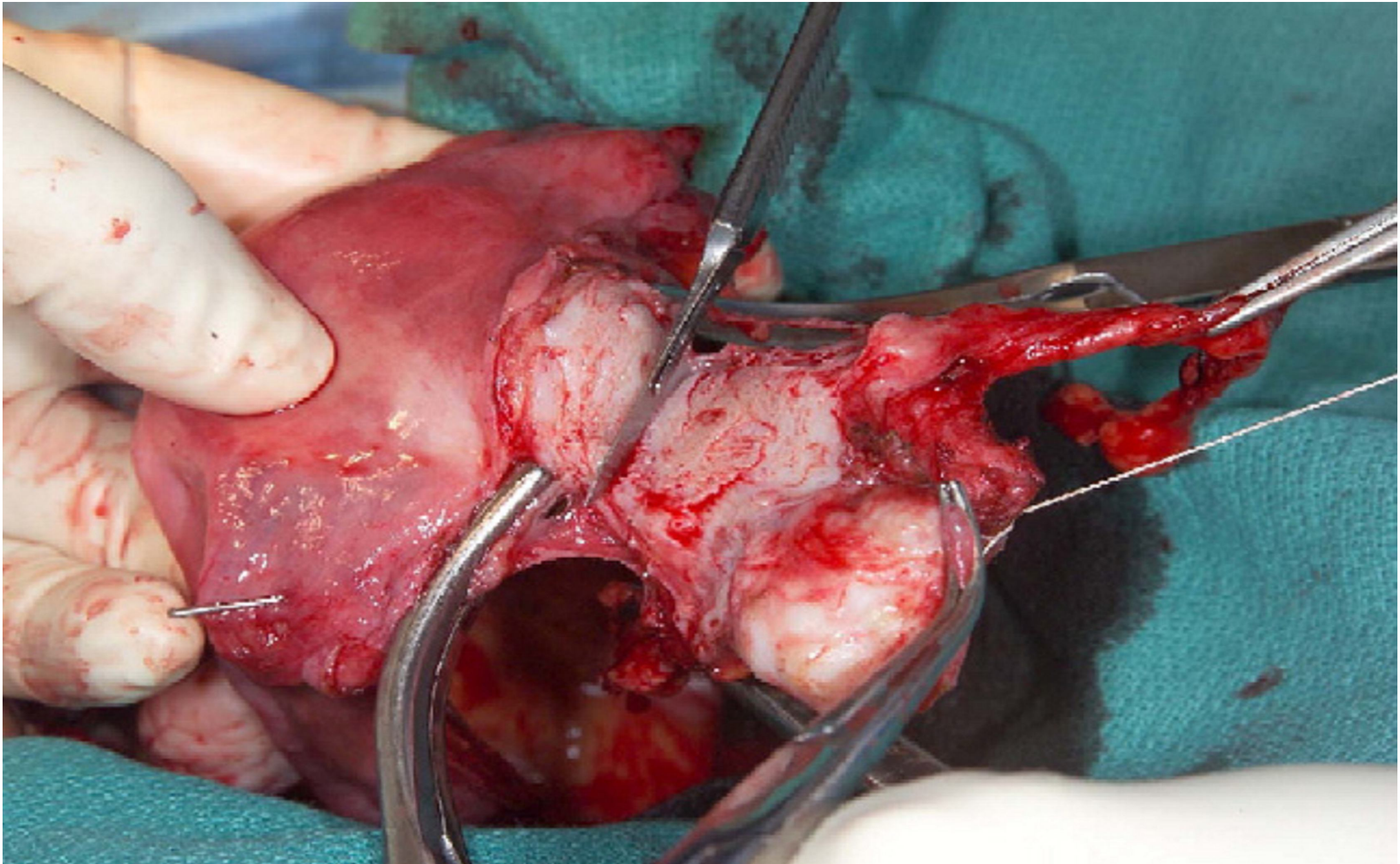
Characteristics (2006~2009 CGMH-CY ; 2010~2011 CSH)

	<u>RT</u> (N=11)
Age (<u>years</u>)	29 (range, 24-32)
Hisrology (SCC)	8
(AdenoCA)	3
Operative time (<u>mins</u>)	167 (range, 136 – 214)
Blood loss (ml)	226 (range, 50-720)
Hospital stay (days)	6 (range, 5-10)
Tumor size (cm)	1.7 (range, 0-2.5)

Case 8: 27 Y/O, G0P0, Unmarried,

- Cervical cancer Ib1,
- Post conservative radical trachelectomy and lymphadenectomy
- NED for 2.5 years





Se: 0001092
Im: 2959

邱煜琴

Study Date: 2009/6/23

Study Time: 上午 12:00:00

MRN:



邱煜琴 女 92355124 05B09B
71-01-30 Q222638719

Page 1/1

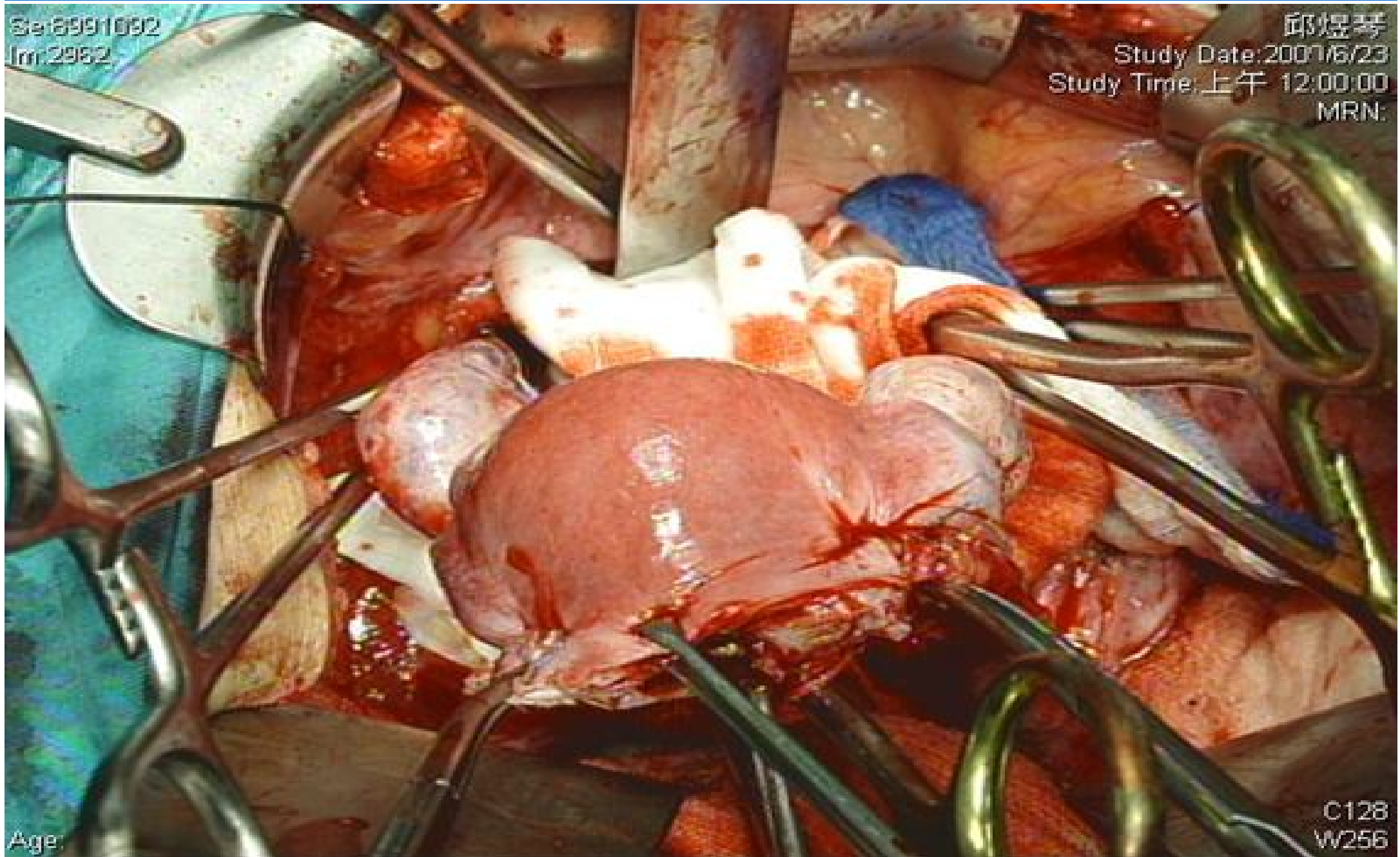
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CT28

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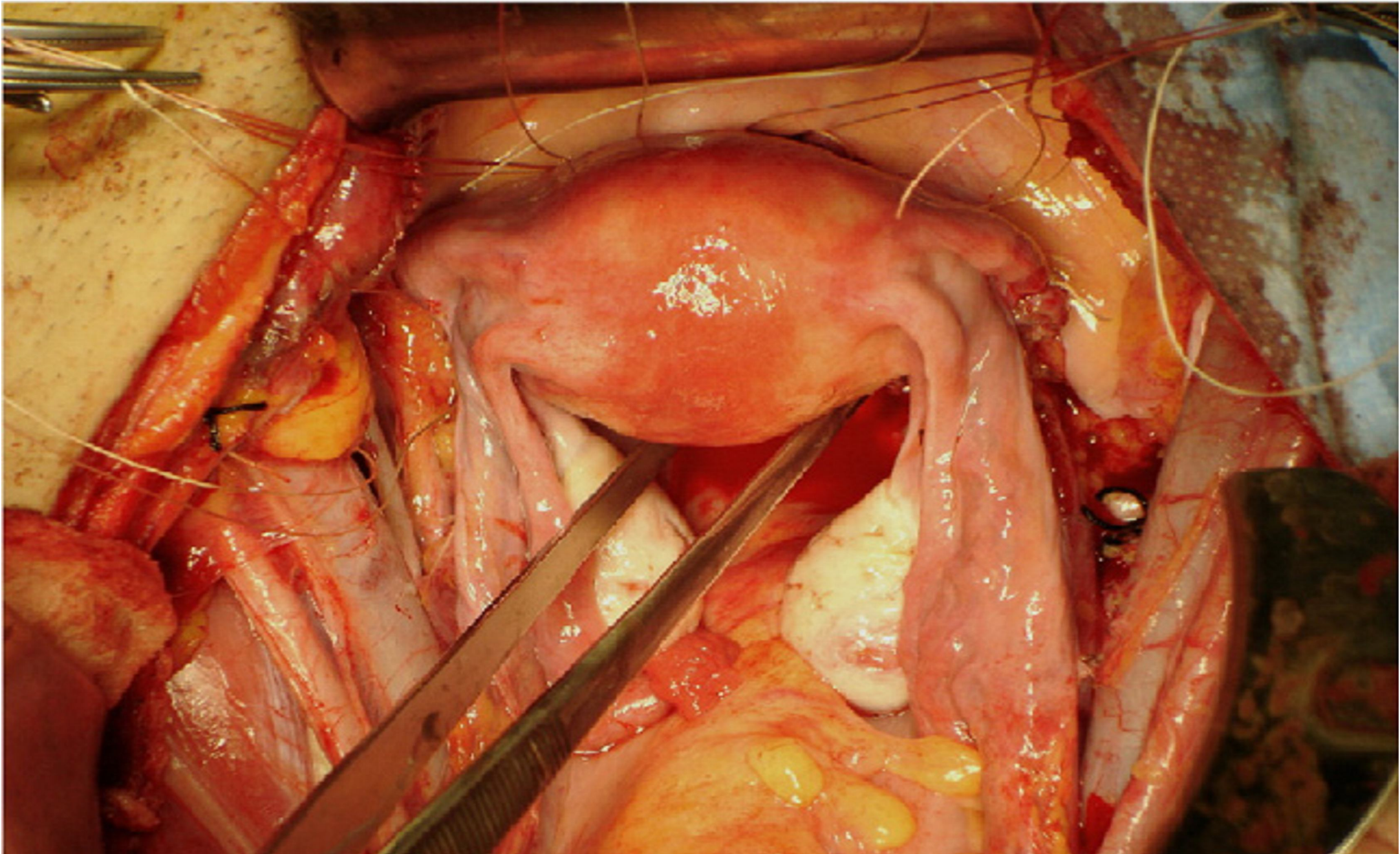
Ser:6991092
Im:2982

邱煜琴
Study Date:2007/6/23
Study Time:上午 12:00:00
MRN:



Age:

C128
W256



RESULTS

Operation records

Characteristics	RT
Successful Rate	11 (100%)
Dissected Nodes (Mean)	21
Positive Pelvic lymph node	0
Positive para-aortic lymph node	0
Parametrial involvement	0
Positive section margin	0
Operation-related complications	0

RESULTS

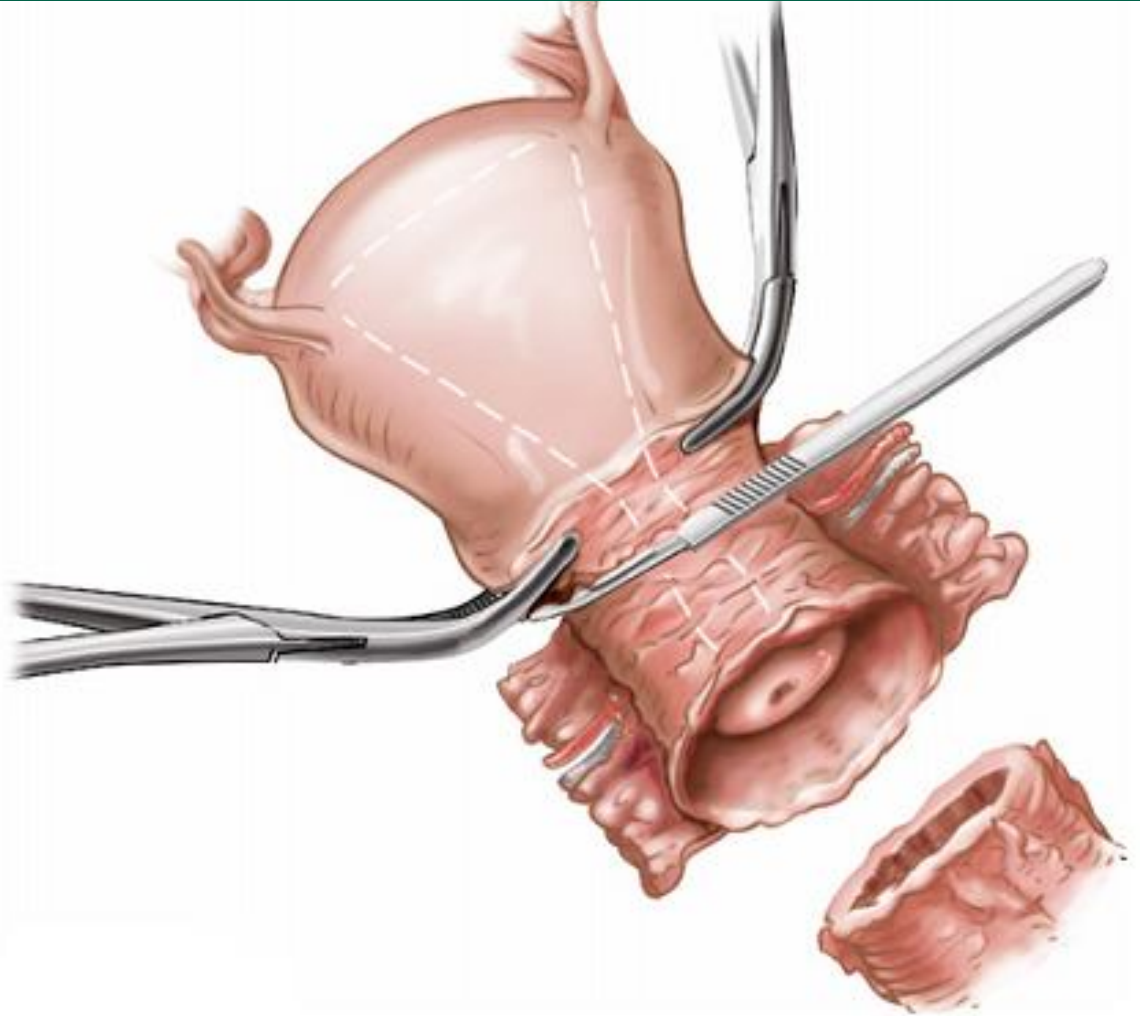
Follow-up (range, 2 - 41 months).

	RT (N=11)
Recurrence rate	0%
Survival	100%
Married	6
Pregnancy	2
Delivery	0

Early cervical cancer - Radical Trachelectomy

Conclusions

Radical trachelectomy can be safe for early stage cervical cancer in young and fertility sparing women.



Suggestion

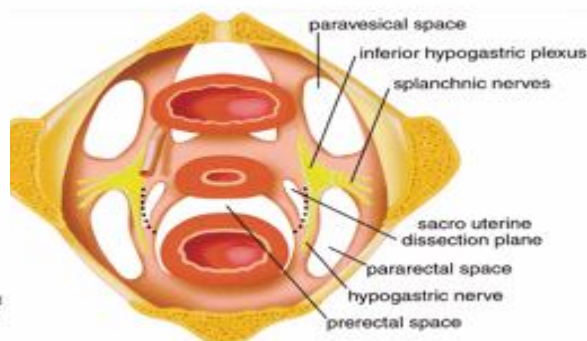
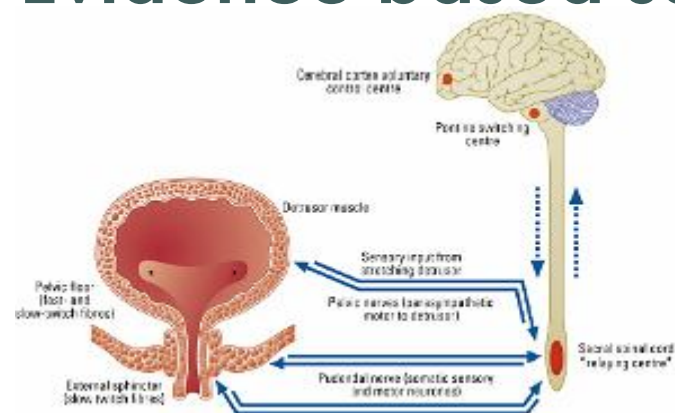
When is Surgery Appropriate ??

- **Young woman**
- **Fertility**
- **When all disease can be excised.**
- **Inform consent**

「手術品質」的臨床運用

Assessing

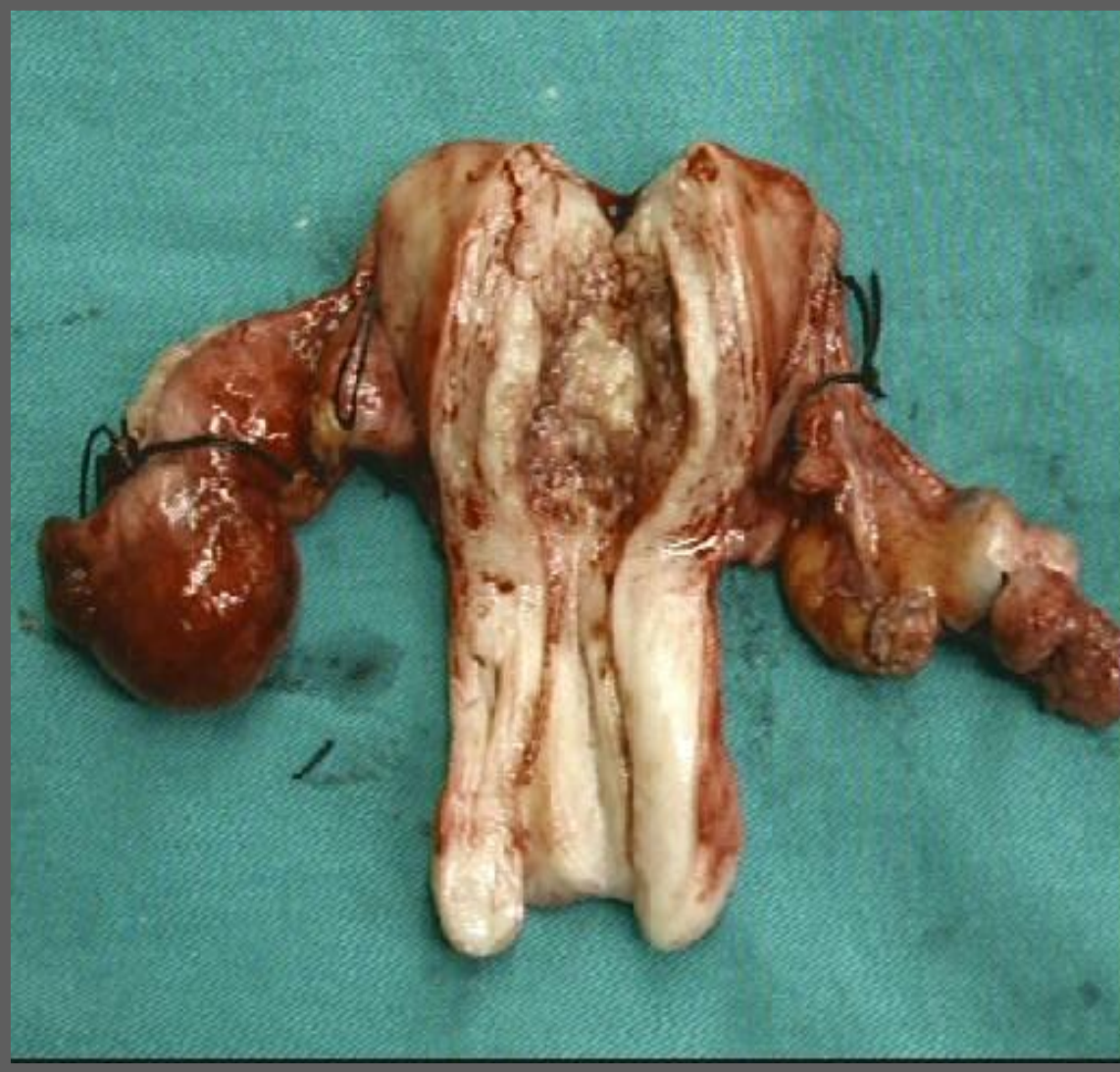
Evidence based surgical improving program



國際婦癌手術訓練中心：（日本、美國、台灣）



Endometrial Cancer



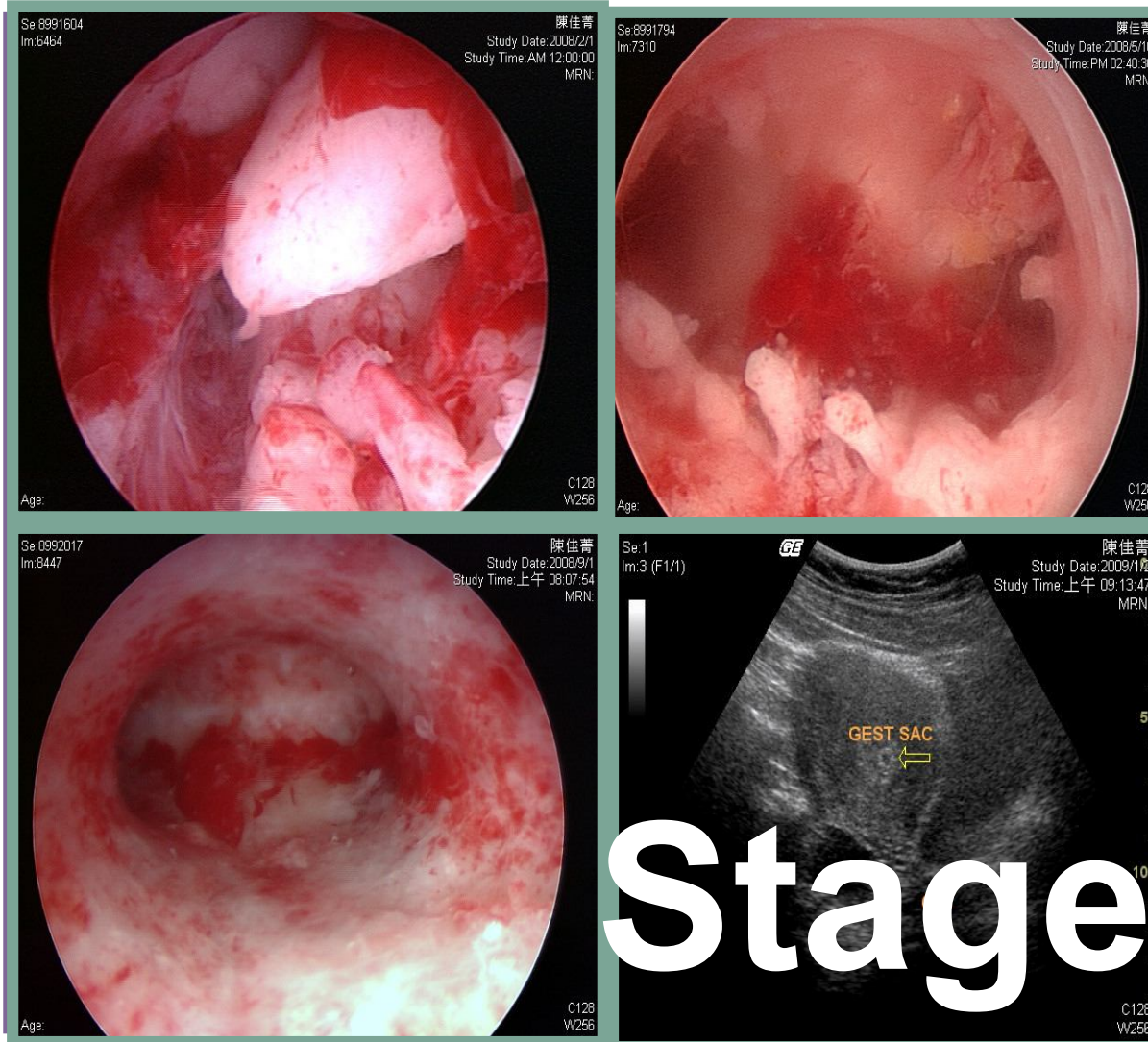
子宮內膜癌

Consensus:

Maximal debulking

1. 全子宮切除手術
2. 雙側卵巢切除手術
3. 骨盆腔淋巴腺切除手術
4. 腹腔網膜切除手術
5. 盲腸切除手術
6. 雙側輸卵管切除手術

子宮癌 (Uterine cancer) 的保守治療



Consensus:

Conservative -
Hormone therapy

Leupline
Megace

Hysteroscopy follow up

Stage Ia g1

Endometrial Cancer

The role of hormones for the treatment of endometrial hyperplasia and endometrial cancer

Chyong-Huey Lai and Huei-Jean Huang

Purpose of review

Hormone therapy has been palliative for advanced/ recurrent endometrial cancer. High remission rates are seen in well-selected stage I, grade 1 endometrial cancer of young women using hormone therapy (usually progestins) as fertility-preserving treatment. Many other hormones, such as gonadotropin-releasing hormone analogs (GnRHa), selective estrogen receptor modulators, aromatase inhibitors, intrauterine progestins, and others are potential modalities. This review updates the recent publications in this area.

Recent findings

Two reports investigating different scheduling of tamoxifen and progestins indicated that tamoxifen may be a valuable adjunct to progestin therapy. GnRHa has been used adjunctively to tamoxifen as second-line hormone therapy for fertility sparing after progestin failed. Aromatase inhibitors have shown their potential in treating endometrial cancer and endometrial hyperplasia as single agent or in combination with progestins. Intrauterine progestins seem efficacious in treating endometrial hyperplasia; its applications on endometrial cancer patients, however, have been limited to postmenopausal women with poor surgical risk.

Summary

Translational research based on molecular mechanisms is mandatory to a more appropriate utilization of hormone therapy. The role of dose, scheduling, route of administration of progestins as well as the addition of other hormonal agents should be further explored by well designed randomized controlled trials.

Keywords

aromatase inhibitor, endometrial neoplasms, gonadotropin-releasing hormone analog, progestin, selective estrogen receptor modulator

Curr Opin Obstet Gynecol 18:29–34, © 2006 Lippincott Williams & Wilkins.

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Correspondence to: Chyong-Huey Lai MD, Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital Linkou Medical Center, 5 Fu-Shin Street, Kwei-shan, Taoyuan 333, Taiwan
Tel: 886 3 3281200; fax: 886 3 3288252; e-mail: laich46@adm.cgmh.org.tw

Current Opinion in Obstetrics and Gynecology 2006, 18:29–34

Abbreviation

GnRHa gonadotropin-releasing hormone analog

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1040-872X

Introduction

Endometrial cancer is the most common female genital tract cancer in the United States [1^{*}]. Cure rates are very high with standard surgery in early stage disease, but the prognosis of advanced or recurrent disease is poor [1^{*},2^{*}]. Hormone therapy has been palliative for advanced/ recurrent endometrial cancer, although anecdotal long-term survival cases have been reported using hormone therapy alone [3,4]. There have been quite a few successful experiences of conservative treatment of endometrial cancer with subsequent pregnancy [5^{**},6–10,11^{**}]. A substantial proportion of young women with well differentiated adenocarcinoma responded well to progestational agents with or without tamoxifen, in the range 60–75% [5^{**},6–10,11^{**}]. Many other hormones, such as gonadotropin-releasing hormone analog (GnRHa), selective estrogen receptor modulator (SERM), aromatase inhibitor, intrauterine progestin, and other agents such as tibolone and danazol, are potential modalities. The management of endometrial cancer precursor lesions, endometrial hyperplasia, also need to be reviewed in order to get a comprehensive update of the role of hormones for the management of endometrial hyperplasia and endometrial cancer.

Treatment for advanced and recurrent endometrial cancer

Progestins are the most widely used hormone therapy in the treatment of advanced and recurrent endometrial cancer [3,12]. Tamoxifen and other SERMs, such as arzoxifene are also active in treating advanced and recurrent endometrial cancer [3,13,14] (see Table 1). Hormone therapy (usually progestins) has also been used concurrently or sequentially with chemotherapy with high response rates (19–80%) [15]. Two reports from the Gynecologic Oncology Group (GOG) (trials 153 and 119) provided an attempt to investigate the role of different scheduling of tamoxifen and progestins (by modulating progesterone receptor expression) and the efficacy of these approaches. Both achieved higher response rates (27% and 33%, respectively) and median overall survival (14 months and 13 months, respectively) as compared to other GOG trials using progestin alone, indicating that tamoxifen may be a valuable adjunct to progestin therapy [16^{**},17^{**}]. Response rates to GnRHa ranged between 0 and 45% in earlier small case series, while 8.9% response rate in a recently published prospective phase II study might be more realistic [18]. A Canadian study using Letrozole (a nonsteroidal aroma-

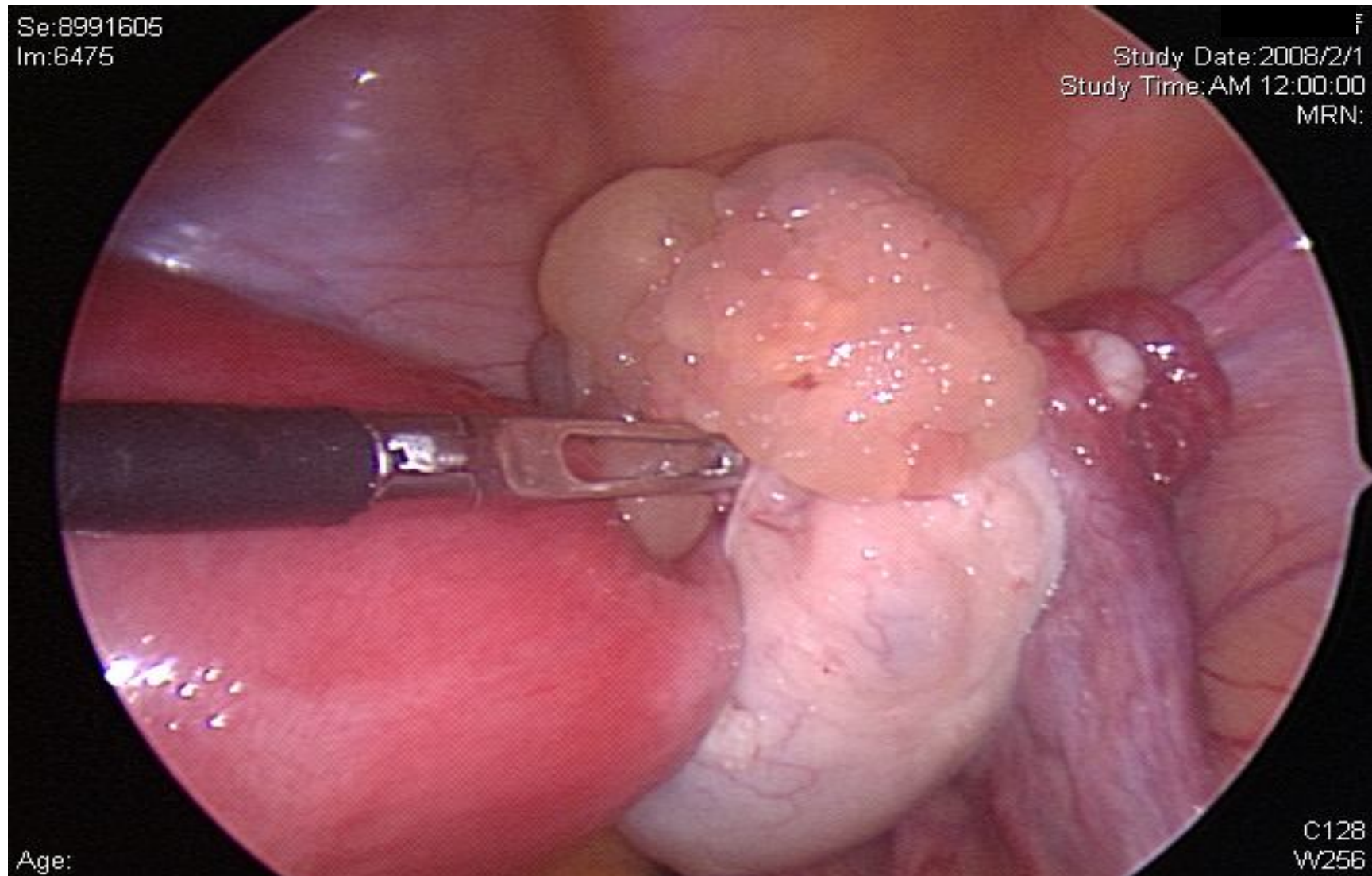
Review:

Conclusion:

High remission rates with subsequent pregnancies are seen in well selected stage Ia, grade 1 endometrial cancer of young women using hormone therapy (usually progestins) as fertility-preserving treatment, yet late recurrences and death have been reported.

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CGMH

Endometrial Cancer



卵巢癌 (Ovarian cancer) 的治療



Consensus:

Maximal debulking

1. 全子宮切除手術
2. 雙側卵巢切除手術
3. 骨盆腔淋巴腺切除手術
4. 腹腔網膜切除手術
5. 盲腸切除手術
6. 雙側輸卵管切除手術
7. 腹膜切除手術

「婦癌手術新境界」 - 手術品質改善



Quality of Life

減低併發症

保護功能

保護器官

生育能力

性生活

YOU DON'T HAVE TO BE
AFRAID OF

cancer
Anymore

Thank You !

