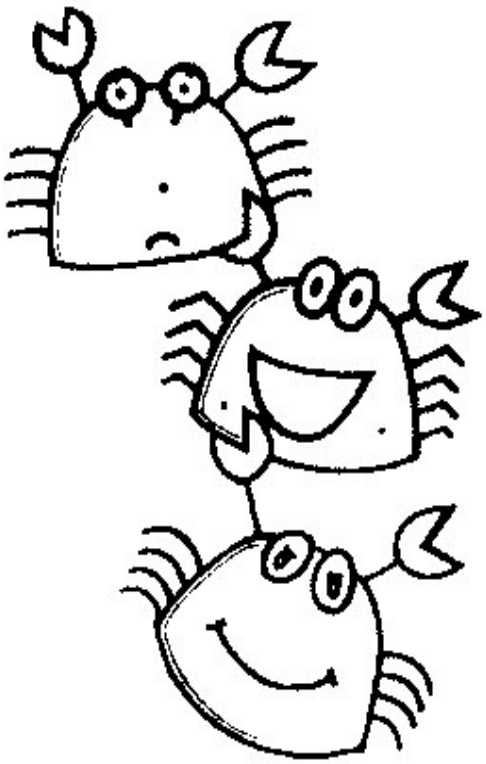
ANNUAL REPORT
ON
GYNECOLOGIC ONCOLOGY
2017



DIVISION OF GYNECOLOGIC ONCOLOGY

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

FACULTY OF MEDICINE, CHIANG MAI UNIVERSITY

CHIANG MAI, THAILAND

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GYNECOLOGIC ONCOLOGY

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CHIANG MAI, THAILAND

WEBSITE : http://www.med.cmu.ac.th/dept/obgyn/Unit/onco/oncofront.htm

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คุณอรทัย ใบใส

PREFACE

One major field of our Department of Obstetrics and Gynecology is the Gynecologic Oncology Division that serves the major of gynecologic cancer patients from the Northern part of Thailand. Many elective fellows visited this unit every year.

This annual report 2017 was summarized their hard-working in last year. It included the number of each gynecologic cancer, the operative procedure and the researches. Cervical cancer still the leading cancer followed by the uterine cancer and ovarian cancer. Many of specialized operations were carried out with the impressive outcome. Furthermore, over 10 publications were published in the well-known journals.

With the new leader team, Assoc. Prof. Kittipat Charoenkwan, I admired him and his colleague for their hard work to the Gynecologic Oncology Division of Chiang Mai University Hospital.

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PREFACE

This updated 2017 version of the Gynecologic Oncology Annual Report summarizes our activities over the year. We managed 500 women diagnosed with gynecologic malignancies. Approximately half of these patients had cervical cancer while uterine cancer and ovarian cancer contributed almost equally to 40% of all the cases. This information implies that carcinoma of the uterine cervix, uterine corpus, and ovary continue to play a dominant role when malignancies of the female genital tract are considered. It should be noted, however, that over the past 20 years, the contribution of cervical cancer has continually decreased from 75% to 50%. During this time period, the contribution of uterine corpus and ovarian cancer has consistently increased from 7% to 20% and from 12% to 18%, respectively. This finding could be at least partly explained by the relative decrease in cervical cancer incidence resulting from more effective screening strategy with wider coverage and the relative increase in incidence of uterine and ovarian cancer due to the lifestyle change of this population.

This report is divided into two sections. The first section provides overview from the Gynecologic Cancer Registry of Chiang Mai University and detailed, organ-specific epidemiological data. The second section describes the infrastructure of our division and our academic contribution including international publications and abstract presentations.

I would like to express my sincere gratitude to Mrs. Narisa Sribanditmongkol for her excellent work on gathering data for and editing this publication. Also, I am thankful to Ms. Sukanya Yanunto and Ms. Orathai Baisai for their hard work and great help on day-to-day data collection and database maintenance. In addition, I would like to hereby acknowledge the kind help and collaboration of our colleagues in Radiation Oncology, Gynecologic Pathology, Medical Oncology, Urology, Gastrointestinal/Colorectal Surgery, and Nursing departments. Furthermore, I deeply appreciate my Gynecologic Oncology colleagues and fellows for their perseverance and dedication. Without their determination, our mission would not be possible. Finally, a special word of thankfulness goes to Professor Jatupol Srisomboon, founding member and senior consultant of our

division, and Associate Professor Prapaporn Suprasert, chairman of the department of Obstetrics and Gynecology for their unwavering support.

Associate Professor Kittipat Charoenkwan, MD, MSc
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SECTION I

- **Gynecologic Oncology Registry**
  Chiang Mai University: 2017

- **Gynecologic Oncology Multiple Primary Cancer**

- **Operations and Procedures in Gynecologic Oncology**

- **Organ Specific Gynecologic Cancer**
  - Cancer of the Cervix
  - Cancer of the Ovary
  - Cancer of the Uterine Corpus
  - Cancer of the Vulva
  - Cancer of the Vagina
  - Cancer of the Fallopian Tube
  - Cancer of the Peritoneum
  - Cancer of Multiple Primary Gynecologic Organs
  - Gestational Trophoblastic Disease
  - Cancer of Other Gynecologic Organs

TABLE 1: Gynecologic Oncology Registry: Chiang Mai University 1997-2017

Site	1997 Number (%)	1998 Number (%)	1999 Number (%)	2000 Number (%)	2001 Number (%)	2002 Number (%)	2003 Number (%)	2004 Number (%)	2005 Number (%)	2006 Number (%)
Cervix	547 (75.3)	483 (72.9)	497 (75.3)	502 (71.3)	500 (70.8)	521 (69.7)	624 (71.7)	532 (66.9)	525 (66.4)	488 (66.8)
Ovary	87 (12.0)	83 (12.5)	82 (12.4)	96 (13.6)	90 (12.7)	110 (14.7)	111 (12.8)	126 (15.8)	121 (15.3)	114 (15.6)
Corpus	48 (6.6)	47 (7.1)	49 (7.4)	56 (8.0)	63 (8.9)	61 (8.2)	67 (7.7)	89 (11.2)	97 (12.3)	84 (11.5)
Vulva	20 (2.7)	21 (3.2)	15 (2.2)	29 (4.1)	23 (3.3)	25 (3.3)	29 (3.3)	22 (2.8)	19 (2.4)	15 (2.1)
Vagina	11 (1.4)	10 (1.5)	3 (0.5)	2 (0.3)	9 (1.3)	6 (0.8)	12 (1.4)	5 (0.6)	4 (0.5)	5 (0.7)
FT	-	2 (0.3)	3 (0.5)	5 (0.7)	3 (0.4)	4 (0.5)	6 (0.7)	5 (0.6)	4 (0.5)	7 (1.0)
PPA	-	-	2 (0.3)	1 (0.1)	-	2 (0.3)	7 (0.8)	3 (0.4)	4 (0.5)	6 (0.8)
GTT	14 (1.9)	16 (2.4)	8 (1.2)	13 (1.9)	18 (2.6)	19 (2.5)	14 (1.6)	13 (1.6)	17 (2.1)	12 (1.6)
Total	**727 (100)**	**662 (100)**	**660 (100)**	**704 (100)**	**706 (100)**	**748 (100)**	**870 (100)**	**795 (100)**	**791 (100)**	**731 (100)**

PPA = Primary Peritoneal Adenocarcinoma FT = Fallopian Tube GTT = Gestational Trophoblastic Tumors

TABLE 1: Gynecologic Oncology Registry: Chiang Mai University 1997-2017 (continued)

Site	2007 Number (%)	2008 Number (%)	2009 Number (%)	2010 Number (%)	2011 Number (%)	2012 Number (%)	2013 Number (%)	2014 Number (%)	2015 Number (%)	2016 Number (%)
Cervix	480 (63.6)	473 (63.2)	436 (58.1)	449(64.2)	387(57.1)	345 (57.9)	285 (54.8)	297 (58.3)	244 (52.6)	251 (52.5)
Ovary	132 (17.5)	115 (15.2)	141 (18.8)	105 (15.0)	118 (17.5)	86 (14.4)	85 (16.3)	87 (17.1)	85 (18.3)	69 (14.4)
Corpus	91 (12.0)	117 (15.4)	116 (15.5)	94 (13.4)	114 (16.9)	106 (17.8)	109 (21.0)	92 (18.1)	93 (20.0)	110 (23.0)
Vulva	11 (1.5)	21 (2.8)	24 (3.2)	21 (3.0)	16 (2.4)	27 (4.5)	24 (4.6)	11 (2.2)	15 (3.2)	22 (4.6)
Vagina	6 (0.7)	7 (0.9)	7 (0.9)	12 (1.7)	11 (1.6)	5 (0.8)	2 (0.4)	2 (0.4)	2 (0.4)	3 (0.6)
FT	7 (0.9)	4 (0.5)	4 (0.5)	6 (0.9)	3 (0.4)	4 (0.7)	3 (0.6)	7 (1.4)	11 (2.4)	11 (2.3)
PPA	11 (1.5)	7 (0.9)	8 (1.1)	-	5 (0.7)	8 (1.3)	4 (0.8)	6 (1.2)	4 (0.9)	4 (0.8)
GTT	17 (2.3)	15 (2.0)	14 (1.9)	12 (1.7)	22 (3.3)	15 (2.5)	8 (1.5)	7 (1.4)	10 (2.2)	8 (1.7)
Total	**755 (100)**	**759 (100)**	**750 (100)**	**699 (100)**	**676 (100)**	**596 (100)**	**520 (100)**	**509 (100)**	**464 (100)**	**478 (100)**

PPA = Primary Peritoneal Adenocarcinoma FT = Fallopian Tube GTT = Gestational Trophoblastic Tumors

TABLE 1: Gynecologic Oncology Registry: Chiang Mai University 1997-2017 (continued)

Site	2017 Number (%)
Cervix	256 (51.2)
Ovary	90 (18.0)
Corpus	102 (20.4)
Vulva	20 (4.0)
Vagina	5 (1.0)
FT	9 (1.8)
PPA	2 (0.4)
GTT	16 (3.2)
Total	**500 (100)**

Gynecologic Oncology Multiple Primary Cancers: Chiang Mai University 2002-2017

Multiple Primary Cancers	2002 Number	2003 Number	2004 Number	2005 Number	2006 Number	2007 Number	2008 Number	2009 Number	2010 Number	2011 Number	2012 Number
Ovarian and Cervical Cancer	**2**	**1**	**1**	**1**	**-**	**-**	**1**	**-**	**-**	**-**	**-**
Ovarian and Corpus Cancer	**7**	**-**	**5**	**13**	**5**	**4**	**8**	**5**	**7**	**4**	**4**
Corpus and Cervical Cancer	**1**	**-**	**-**	**1**	**-**	**1**	**-**	**-**	**-**	**-**	**-**
Corpus and Fallopian Tube Cancer	**1**	**-**	**-**	**-**	**1**	**-**	**-**	**1**	**1**	**-**	**1**
Corpus and Peritoneal Cancer	**-**	**1**	**1**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Corpus and Choriocarcinoma	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	**-**	**-**	**-**
Cervical and Fallopian Tube Cancer	**-**	**-**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Ovarian and Fallopian Tube	**-**	**-**	**-**	**-**	**-**	**1**	**-**	**1**	**1**	**-**	**-**
Ovarian and Fallopian Tube and Corpus Cancer	**-**	**-**	**-**	**-**	**1**	**1**	**-**	**-**	**1**	**-**	**-**
Cervical and Vulva Cancer	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2**	-	**1**
Corpus and Colon Cancer	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	-	-
Corpus and Bladder cancer	-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	-
Cervix and Ileal cancer	-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1**	-

Gynecologic Oncology Multiple Primary Cancers: Chiang Mai University 2002-2017

Multiple Primary Cancers	2013 Number	2014 Number	2015 Number	2016 Number	2017 Number
Ovarian and Cervical Cancer	-	1	-	-	-
Ovarian and Corpus Cancer	4	4	3	5	2
Corpus and Cervical Cancer	-	1	-	-	2
Corpus and Fallopian Tube Cancer	-	1	-	-	-
Corpus and Peritoneal Cancer	-	-	-	-	-
Corpus and Choriocarcinoma	-	-	-	-	-
Cervical and Fallopian Tube Cancer	-	-	-	-	-
Ovarian and Fallopian Tube	-	-	-	-	1
Ovarian and Fallopian Tube and Corpus Cancer	-	-	-	1	-
Cervical and Vulva Cancer	-	-	-	-	-
Corpus and Colon Cancer	-	-	-	-	-
Corpus and Bladder cancer	-	-	-	-	1
Cervix and Ileal cancer	-	-	-	-	-

Operations and Procedures in Gynecologic Oncology

Operations and Procedures	1997 Number	1998 Number	1999 Number	2000 Number	2001 Number	2002 Number	2003 Number	2004 Number	2005 Number	2006 Number
Surgery for Ovarian & Tubal Cancer	64	43	64	70	45	69	88	79	80	111
Surgery for Corpus Cancer	33	28	26	36	43	39	47	60	75	53
Surgery for Vulvar Cancer	10	14	5	19	12	14	21	19	14	12
Radical hysterectomy*	55	77	113	120	116	135	150	151	149	143
Laparoscopic Radical Hysterectomy*	-	-	-	-	-	-	-	4	18	21
Radical Parametrectomy*	2	2	1	1	1	3	4	1	1	2
Laparoscopic Radical Parametrectomy*	-	-	-	-	-	-	-	1	1	3
Extrafascial Hysterectomy	118	110	155	182	121	89	43	35	52	55
Total Laparoscopic Hysterectomy		-	-	-	-	-	10	11	9	4
CKC	66	65	79	13	14	22	16	9	10	5
LEEP	61	35	166	207	194	221	380	276	261	309
Cryosurgery	20	15	18	8	4	3	1	-	2	-
Colposcopy	227	235	463	371	369	306	357	399	499	627

*** with pelvic lymphadenectomy**

CKC = Cold Knife Conization

LEEP = Loop Electrosurgical Excision Procedure

Operations and Procedures in Gynecologic Oncology (continued)

Operations and Procedures	**2007** Number	**2008** Number	**2009** Number	**2010** Number	**2011** Number	**2012** Number	**2013** Number	**2014** Number	**2015** Number	**2016** Number
Surgery for Ovarian & Tubal Cancer	89	95	115	87	117	103	88	92	105	82
Surgery for Corpus Cancer	80	106	83	87	96	94	100	81	72	110
Surgery for Vulvar Cancer	8	21	18	20	14	17	20	28	15	28
Radical Hysterectomy*	120	121	103	125	89	71	58	57	55	58
Modified Radical Hysterectomy*	-	-	18	12	17	12	7	10	9	6
Abandoned Hysterectomy*	-	-	1	1	3	7	2	2	2	2
Radical Parametrectomy*	1	-	1	-	2	2	-	2	1	1
Laparoscopic Surgical Staging for Corpus Cancer	-	-	-	6	4	3	2	5	4	4
Laparoscopic Radical Hysterectomy*	11	16	5	-	9	9	8	3	3	8
Laparoscopic Radical Trachelectomy*	-	-	-	-	-	-	-	2	-	-
Laparoscopic Radical Parametrectomy*	-	-	-	2	-	-	-	-	-	-
Total Laparoscopic Hysterectomy	4	2	2	2	2	1	1	3	-	-
Robotic Radical Hysterectomy*	-	-	-	-	-	-	2	1	-	-
CKC	15	6	5	6	2	-	1	-	-	-
LEEP	317	235	175	203	157	173	239	144	215	160
Colposcopy	519	556	474	409	406	494	728	659	775	600

*** with pelvic lymphadenectomy**

CKC = Cold Knife Conization

LEEP = Loop Electrosurgical Excision Procedure

Operations and Procedures in Gynecologic Oncology (continued)

Operations and Procedures	**2017** Number
Surgery for Ovarian & Tubal Cancer	90
Surgery for Corpus Cancer	98
Surgery for Vulvar Cancer	17
Radical Hysterectomy*	74
Modified Radical Hysterectomy*	4
Abandoned Hysterectomy*	-
Radical Parametrectomy*	2
Laparoscopic Radical Hysterectomy*	3
NOTES Assisted Vaginal Hysterectomy	2
NOTES Assisted Extrafascial Hysterectomy	1
Laparoscopic Radical Parametrectomy*	-
Total Laparoscopic Hysterectomy	1
CKC	-
LEEP	116
Colposcopy	537

Cancer of the Cervix

- **Distribution by**
  - Age
  - Parity
  - Stage and Substage
  - HIV Status
  - Histological Type
  - Treatment

TABLE 2: Cancer of the Cervix: Age Distribution

Age	Number	Percent
≤ 30	5	2.0
31-40	36	14.1
41-50	70	27.3
51-60	82	32.0
61-70	50	19.5
71-80	10	3.9
≥ 81	3	1.2
Total	**256**	**100**

Minimum age 26 years, Maximum age 86 years
Mean age 52.4 ±11.9 years

TABLE 3: Cancer of the Cervix: Parity Distribution

Parity	Number	Percent
0	27	10.5
1	63	24.6
2	92	35.9
3	40	15.6
4	16	6.2
5	4	1.6
6	5	2.0
7	7	2.7
8	1	0.4
9	1	0.4
Total	**256**	**100**

TABLE 4: Cancer of the Cervix: Stage Distribution

Stage	Number	Percent
I	91	35.5
II	80	31.3
III	57	22.3
IV	28	10.9
Total	**256**	**100**

TABLE 5: Cancer of the Cervix: Stage and Substage Distribution

	Stage	Number	Percent
I	IA1	16	6.2
	IA2	3	1.2
	IB1	59	23.0
	IB2	13	5.1
II	IIA1	10	3.9
	IIA2	6	2.3
	IIB	64	25.0
III	IIIA	2	0.8
	IIIB	55	21.5
IV	IVA	10	3.9
	IVB	18	7.0
Total		**256**	**100**

TABLE 6: HIV Status in Cervical Cancer Patients dividing by Stage

Stage	Number Negative HIV (%)	Number Positive HIV (%)	Number not done (%)	Total
IA1	15 (5.9)	1(0.4)	0	16(6.3)
IA2	3(1.2)	0	0	3(1.2)
IB1	57(22.3)	2(0.8)	0	59(23.0)
IB2	13(5.1)	0	0	13(5.1)
IIA1	10(3.9)	0	0	10(3.9)
IIA2	5(2.0)	0	1(0.4)	6(2.3)
IIB	60(23.4)	2(0.8)	2(0.8)	64(25.0)
IIIA	2(0.8)	0	0	2(0.8)
IIIB	49(19.1)	4(1.6)	2(0.8)	55(21.5)
IVA	10(3.9)	0	0	10(3.9)
IVB	17(6.6)	0	1(0.4)	18(7.0)
Total	**241(94.1)**	**9(3.5)**	**4(1.6)**	**256**

TABLE 7: Cancer of the Cervix: Distribution by Histological Type

Histological Type	Number	Percent
Squamous cell carcinoma	**210**	
Well differentiated	13	5.1
Moderately differentiated	146	57.0
Poorly differentiated	33	12.9
No defined differentiation	18	7.0
Adenocarcinoma	31	12.1
Adenosquamous	1	0.4
Small cell NE	3	1.2
Leiomyosarcoma of cervix	1	0.4
High grade adeno CA, gastric type	1	0.4
Large cell NE	1	0.4
Mixed large cell NE + PD adeno CA	2	0.8
mixed MD adenoCA+ PD SCCA	1	0.4
mixed small cell NE+ WD adenoCA	1	0.4
undiff CA c minor NE diff	1	0.4
Mixed small cell + SCCA	1	0.4
PDadenoCA + NE differentiate	1	0.4
Unknown	1	0.4
Total	**256**	**100**

*Unknown = Awaiting official pathological report

SCCA = Squamous cell carcinoma MD = Moderately differentiated
NE = Neuroendocrine carcinoma WD = Well differentiated
CA = Carcinoma PD = Poorly differentiated

TABLE 8: Treatment of Cancer of the Cervix

Treatment	Number	Percent
Surgery alone		
TAH	8	3.1
RHPL	21	8.2
LRHPL	3	1.2
Radical parametrectomy with BPL	2	0.8
Extended hysterectomy with BPL	3	1.2
Chemotherapy alone	**15**	5.9
Concurrent chemoradiation+ Brachytherapy	**126**	49.2
RT + Brachytherapy	**13**	5.1
Brachytherapy	**1**	0.4
Combined treatment		0.0
TAH + CCRT (inadvertent hysterectomy 2)	3	1.2
TAH + RT	1	0.4
RHPL+ RT + Brachytherapy	16	6.3
RHPL + Brachytherapy	1	0.4
RHPL + CCRT + Brachytherapy	29	11.3
RHPL + CT	3	1.2
NAC + RHPL + CCRT	3	1.2
NAC + RHPL + RT	1	0.4
Laparoscopic Hysterectomy + CCRT	1	0.4
Extended hysterectomy with BPL + CCRT+ HDR	1	0.4
LEEP (pregnancy plan surgery after delivery)	1	0.4
Others		0.0
Lost to follow-up without treatment	2	0.8
Refer to another hospital for chemotherapy	2	0.8
Total	**256**	100

RHPL Radical Hysterectomy with Bilateral Pelvic Lymphadenectomy
TAH Total Abdominal Hysterectomy
LRHPL Laparoscopic Radical Hysterectomy with Pelvic Lymphadenectomy
TLH Total Laparoscopic Hysterectomy
CCRT Concurrent Chemoradiation
RT Radiation Therapy
CT Chemotherapy
BPL Bilateral Pelvic Lymphadenectomy

Cancer of the Ovary

➢ Distribution by

- Age
- Parity
- Histology
- Histology Subtype
  - Epithelial Group
  - Germ Cell Tumor Group
  - Sex cord-stromal Group
  - Other Groups
- Stage
  - Epithelial Group
  - Germ Cell Group
  - Sex cord-stromal Group
  - Other Groups
- Stage and Histology
- Treatment

TABLE 9: Cancer of the Ovary: Age Distribution

Age	Number	Percent
≤30	7	7.8
31-40	10	11.1
41-50	20	22.2
51-60	32	35.6
61-70	16	17.8
71-80	2	2.2
>80	3	3.3
Total	**90**	**100**

Minimum age 23 years, Maximum age 83 years
Mean age 52.6 ± 12.8 years

TABLE 10: Cancer of the Ovary: Parity Distribution

Parity	Number	Percent
0	27	30.0
1	20	22.2
2	31	34.4
3	9	10.0
4	2	2.2
7	1	1.1
Total	**90**	**100**

TABLE 11: Cancer of the Ovary: Histological Distribution

Histology	Number	Percent
Epithelium	82	91.1
Germ Cell	7	7.8
Sex cord-Stromal	1	1.1
Total	**90**	**100**

TABLE 12: Epithelial Ovarian Cancer: Histological Subtype Distribution

Histological Subtype	Number	Percent
Serous adeno CA	28	34.1
Serous LMP	5	6.1
Clear cell CA	21	25.6
Endometrioid CA	5	6.1
Endometrioid LMP	1	1.2
Mucinous adeno CA	6	7.3
Mucinous LMP	7	8.5
Mixed epithelial CA	4	4.9
Adeno CA	3	3.7
Carcinosarcoma	1	1.2
Undifferentiated CA	1	1.2
Total	**82**	**100**

CA = Carcinoma
LMP = Low malignant potential
NE = Neuroendocrine carcinoma

TABLE 13: Ovarian Germ Cell Tumor (GCT): Histological Subtype Distribution

Histological Subtype	Number	Percent
Yolk sac tumor	2	28.6
Immature teratoma	1	14.3
SCCA arising in mature teratoma	2	28.6
Mucinous adeno CA arising in mature teratoma	1	14.3
Stroma ovarii (LMP)	1	14.3
Total	**7**	**100**

SCCA = squamous cell carcinoma
LMP = low malignant potential

TABLE 14: Sex cord-stromal tumor: Histological Subtype Distribution

Subtype	Number	Percent
Adult granulosa cell tumor	1	100
Total	**1**	**100**

TABLE 15: Epithelial Ovarian Cancer: Stage Distribution

Stage	Number	Percent
IA	14	17.1
IB	1	1.2
IC1	11	13.4
IC2	12	14.6
IC3	4	4.9
IIA	5	6.1
IIB	10	12.2
IIIA	1	1.2
IIIB	5	6.1
IIIC	7	8.5
IVA	6	7.3
IVB	4	4.9
Not staged	2	2.4
Total	**82**	**100**

TABLE 16: Germ Cell Ovarian Cancer: Stage Distribution

Stage	Number	Percent
IA	3	42.9
IC3	2	28.6
IIA	1	14.3
IIB	1	14.3
Total	**7**	**100**

TABLE 17: Sex cord-stromal tumor: Stage Distribution

Stage	Number	Percent
IIIA	1	100
Total	**1**	**100**

TABLE 18: Ovarian Cancer: Stage and Histology Distribution

	Epithelial	Percent	Germ cell	Percent	Sex cord stromal tumor	Percent
IA	14	17.1	3	42.9	-	-
IB	1	1.2	-	-	-	-
IC1	11	13.4	-	-	-	-
IC2	12	14.6	-	-	-	-
IC3	4	4.9	2	28.6	-	-
IIA	5	6.1	1	14.3	-	-
IIB	10	12.2	1	14.3	-	-
IIIA	1	1.2	-	-	1	100
IIIB	5	6.1	-	-	-	-
IIIC	7	8.5	-	-	-	-
IVA	6	7.3	-	-	-	-
IVB	4	4.9	-	-	-	-
Not staged*	2	2.4	-	-	-	-
Total	**82**	**100**	**7**	**100**	**1**	**100**

* Not staged due to data not available

TABLE 19: Cancer of the Ovary: Primary Treatment and Adjuvant Chemotherapy

Treatment	Number	Percent
Complete SSP with adjuvant chemotherapy	42	46.7
Complete SSP without adjuvant chemotherapy	7	7.8
NAC + Complete SSP with adjuvant chemotherapy	1	1.1
Incomplete SSP with adjuvant chemotherapy	24	26.7
Incomplete SSP without adjuvant chemotherapy	10	11.1
NAC + Incomplete SSP with adjuvant chemotherapy	4	4.4
Chemotherapy only	2	2.2
Total	**90**	**100**

SSP = Surgical Staging Procedure

NAC = Neoadjuvant Chemotherapy

FU = Follow-up

TABLE 20: Ovarian Cancer: Outcome of Treatment

Outcome	Number	Percent
Under FU without disease	51	56.7
During treatment	28	31.1
During treatment with progress/persist of disease	1	1.1
Best supportive care	2	2.2
Recurrence	1	1.1
Died of disease	1	1.1
Lost to FU	5	5.6
Refer to provincial hospital for chemotherapy	1	1.1
Total	**90**	**100**

FU = Follow-up

Cancer of the Uterine Corpus

➢ Distribution by

- Age
- Menopausal Status
- Underlying Medical Diseases
- Parity
- Clinical Staging
- Surgical Staging
- Histology
- Treatment

TABLE 21: Cancer of the Corpus: Age Distribution

Age	Number	Percent
30-40	5	4.9
41-50	8	7.8
51-60	34	33.3
61-70	45	44.1
71-80	9	8.8
>80	1	1.0
Total	**102**	**100**

Minimum age 30 years, Maximum age 83 years
Mean age 59.6±9.6 years

TABLE 22: Cancer of the Corpus: Distribution by Menopausal Status

Menopausal Status	Number	Percent
Yes	85	83.3
No	17	16.7
Total	**102**	**100**

TABLE 23: Cancer of the Uterine Corpus: Distribution by Underlying Diseases

Medical disease	Number	Percent
None	38	37.3
Hypertension	13	12.7
Hypertension + DM	5	4.9
Hypertension + DM + dyslipidemia	10	9.8
Hypertension + DM + dyslipidemia + CA breast + CKD	1	1.0
Hypertension + DM + CKD	1	1.0
Hypertension + DM + ESRD	1	1.0
Hypertension + DM + IHD	1	1.0
Hypertension + dyslipidemia	9	8.8
Hypertension + dyslipidemia + CAD	1	1.0
Hypertension + dyslipidemia + DVT	1	1.0
Hypertension + dyslipidemia + MDD	1	1.0
Hypertension + CKD + IFG + COPD	1	1.0
Hypertension + dyslipidemia + AKI	1	1.0
Hypertension + gout + IDA	1	1.0
Hypertension + history of CA colon	1	1.0
Dyslipidemia	1	1.0
Dyslipidemia + IFG	1	1.0
DM + Dyslipidemia	1	1.0
DM	2	2.0
History of CA breast	2	2.0
AKI	1	1.0
MDD	1	1.0
Myasthenia gravis	1	1.0
Non-sustained ventricular tachycardia	1	1.0
Chronic stable angina	1	1.0
AL	1	1.0
Rheumatoid	1	1.0
Single kidney	1	1.0
Thyrotoxicosis	1	1.0
Total	**102**	**100**

AF = Atrial fibrillation
AKI = Acute kidney injury
AL = HIV seropositivity
CA = Cancer
CKD = Chronic kidney disease
CAD = Coronary artery disease
COPD = Chronic obstructive pulmonary disorder
DM = Diabetes mellitus
DVT = Deep vein thrombosis
ESRD = End-Stage Renal Disease
IFG = Impaired fasting glycemia
IDA = Iron deficiency anemia
MDD = Major depressive disorder

TABLE 24: Cancer of the Uterine Corpus: Distribution by Parity

Parity	Number	Percent
0	25	24.5
1	20	19.6
2	34	33.3
3	15	14.7
4	4	3.9
5	1	1.0
6	2	2.0
9	1	1.0
Total	**102**	**100**

TABLE 25: Cancer of the Uterine Corpus: Distribution by Surgical Staging

	Stage	Number	Percent
I	IA	32	31.4
	IB	16	15.7
II	II	11	10.8
III	IIIA	10	9.8
	IIIB	1	1.0
	IIIC1	11	10.8
	IIIC2	7	6.9
IV	IVB	13	12.7
Not staged		1	1.0
Total		**102**	**100**

TABLE 26: Cancer of the Uterine Corpus: Histologic Distribution

Histology Type	Number	Percent
Endometrioid adeno CA		
Grade I	32	31.4
Grade II	13	12.7
Grade III	14	13.7
High grade serous adeno CA	9	8.8
Mixed type	7	6.9
Undifferentiated CA	4	3.9
Adenosarcoma	1	1.0
Carcinosarcoma	17	16.7
Leiomyosarcoma	3	2.9
Low grade ESS	1	1.0
Perivascular epithelioid cell neoplasm of uncertain malignant potential	1	1.0
Total	**102**	**100**

CA = Carcinoma
ESS = Endometrial stromal sarcoma

TABLE 27 : Treatment of Corpus Cancer

Treatment	Number	Percent
Complete SSP	25	24.5
Complete SSP + DMPA	1	1.0
Complete SSP + Chemotherapy	16	15.7
Complete SSP + Radiation therapy + Brachytherapy	9	8.8
Complete SSP + Brachytherapy	6	5.9
Complete SSP + Sequential chemoradiation therapy + Brachytherapy	28	27.5
Incomplete SSP	4	3.9
Incomplete SSP + Chemotherapy	3	2.9
Incomplete SSP + Brachytherapy	2	2.0
Incomplete SSP + Radiation therapy + Brachytherapy	2	2.0
Incomplete SSP + Sequential chemoradiation therapy	1	1.0
Incomplete SSP awaiting pathological result	1	1.0
NAC + Debulking tumor	1	1.0
Chemotherapy	3	2.9
Total	**102**	**100**

SSP = Surgical staging procedure
NAC = Neoadjuvant chemotherapy

TABLE 28: Outcome of Treatment of Corpus Cancer

Outcome	Number	Percent
Under FU without disease	46	45.1
During treatment	46	45.1
During treatment with progress/persist of disease	1	1.0
Refer to provincial hospital for chemotherapy	1	1.0
Best supportive care	2	2.0
Died of disease	2	2.0
Lost to FU	4	3.9
Total	**102**	**100**

FU = Follow-up

Cancer of the Vulva

- **Distribution by**
  - Age
  - Stage
  - Histology
  - Treatment

TABLE 29: Cancer of the Vulva: Age Distribution

Age	Number	Percent
≤40	1	5
41-50	5	25
51-60	8	40
61-70	3	15
71-80	2	10
>80	1	5
Total	**20**	**100**

Minimum age 38 years, Maximum age 81 years
Mean age 57.6. ± 11.6 years
*3 cases of Bartholin cancer

TABLE 30 : Cancer of the Vulva: Stage Distribution

Stage	Number	Percent
IA	2	10.0
IB	8	40.0
II	3	15.0
IIIC	4	20.0
IVA	1	5.0
IVB	2	10.0
Total	**20**	**100**

TABLE 31: Cancer of the Vulva: Histological Type Distribution

Histological Type distribution	Number	Percent
Squamous cell carcinoma		
Well differentiated	4	20.0
Moderately differentiated	9	45.0
Poorly differentiated	2	10.0
No defined differentiation	1	5.0
Adenoid cystic CA	1	5.0
Invasive Paget's disease	2	10.0
Leiomyosarcoma	1	5.0
Total	**20**	**100**

CA = carcinoma

Cancer of the Vagina

- **Distribution by**
  - Age
  - Stage
  - Histology
  - Treatment

TABLE 33: Cancer of the Vagina

No	HN	Age	Stage	Histology	Treatment	Outcome
1	2249235	64	IVB	SCCA	CCRT	Under follow up without disease
2	3091372	60	IIIC	SCCA	CCRT	During treatment
3	3385467	55	I	Malignant mesenchymal neoplasm	RHPL+ BSO + Megace	During treatment
4	3791700	49	II	Clear cell CA	PTx6 + RT (s/p TAH + BSO due to endometriosis)	During treatment
5	3826770	56	IVB	Leiomyosarcoma	Doxetaxel + Gem x1> Adriamycin x4 >Pazopanib	During treatment

BGND = bilateral groin node dissection
FU = follow up
SCCA = squamous cell carcinoma
RT = Radiation therapy

TABLE 32 : Treatment of Cancer of the Vulva

Treatment	Number	Percent
Radical local excision + BGND + CCRT	2	10.0
Radical local excision + BGND + RT	1	5.0
Radical local excision + BGND + CT	1	5.0
Radical hemivulvectomy + BGND + CT	1	5.0
Radical hemivulvectomy + BGND + CT + RT	2	10.0
Radical vulvectomy + BGND	2	10.0
Radical vulvectomy + BGND + RT	1	5.0
WLE	2	10.0
WLE + RT	1	5.0
TAH + BSO + Vaginal excision	1	5.0
BGND + RT	1	5.0
BGND + CT	2	10.0
CT	2	10.0
CCRT	1	5.0
Total	**20**	**100**

WLE = Wide local excision
BGND = Bilateral groin node dissection
RT = Radiation therapy
CCRT = Concurrent chemoradiation
CT = Chemotherapy
TAH = Total abdominal hysterectomy
BSO = Bilateral salpingo-oophorectomy

Cancer of the Fallopian Tube

TABLE 34: Cancer of the Fallopian Tube 2017

Data	Case 1	Case 2	Case 3
Age	58	66	61
Marital status	Married	Married	Married
Parity	2-0-0-2	2-0-0-2	2-0-0-2
Presenting symptoms	Abdominal distension	Abdominal distension	Abdominal distension, pelvic pain
Stage	IVB (liver metastasis)	IIIC	IIIB
Histology	High grade serous adeno CA	High grade serous CA	High grade CA consistent with endometrioid gr.3
Treatment	TAH, BSO, partial omentectomy, ascites collection + PT x6	TAH, BSO, partial omentectomy, debulking tumor, loop colostomy + PT x6	NAC x1 > TAH, BSO, omental biopsy, debulking tumor, loop colostomy + PT x6
Outcome	Under FU without disease	Under FU without disease	Under FU without disease

Data	Case 4	Case 5	Case 6
Age	54	59	45
Marital status	Married	Married	Married
Parity	0	1-0-0-0	6-0-0-5
Presenting symptoms	Abnormal uterine bleeding	Pelvic pain, abnormal discharge/vagina	Pelvic pain, abdominal mass
Stage	IIIA2	IIIB	IIB
Histology	High grade serous adeno CA	High grade serous adeno CA	High grade serous adeno CA
Treatment	TAH, BSO, partial omentectomy + single Carbo	TAH, BSO, omental biopsy, debulking tumor, Lt. pelvic LN sampling, PANS, loop sigmoid colostomy + PT x6	TAH, BSO, debulking tumor, ascites collection + PT
Outcome	During treatment	During treatment	Lost to FU

Data	Case 7	Case 8	Case 9
Age	56	59	69
Marital status	Married	Married	Married
Parity	2-0-0-2	1-0-0-1	3-0-0-3
Presenting symptoms	Pelvic pain	Pelvic mass	Pelvic mass, abnormal discharge/vagina
Stage	IIIC	IVB c lung metas	IA
Histology	High grade serous adeno CA	High grade serous adeno CA	Carcinosarcoma
Treatment	TAH, BSO, debulking tumor, partial omentectomy, ascites collection	TAH, BSO, debulking tumor, partial omentectomy, ascites collection	TAH, BSO + PT
Outcome	During treatment	During treatment	During treatment

BPNS = Bilateral pelvic node sampling
CA = Carcinoma
TAH&BSO = Total abdominal hysterectomy and bilateral salpingo- oophorectomy
PT = Paclitaxel and Carboplatin
PD = Poorly differentiated
RT = Right
LT = Left
SO = Salpingo-oophorectomy

Cancer of the Peritoneum

TABLE 35: Cancer of the Peritoneum 2017

Data	Case 1	Case 2
Age	70	64
Marital status	Married	Married
Parity	3-0-0-3	1-0-0-1
Presenting symptoms	Abdominal distension	Abdominal distension
Stage	IVA	III at least
Histology	High grade serous adeno CA	Adeno CA
Treatment	NAC(Carboplatin)x1	NAC (PTx3) + TAH,BSO, omental biopsy, peritoneal biopsy + PT
Outcome	Lost to FU	During treatment

PT = Paclitaxel + Carboplatin
PD = Poorly differentiated
MD = Moderate differentiated
NAC = Neoadjuvant chemotherapy
TAH&BSO = Total abdominal hysterectomy and bilateral salpingo-oophorectomy

Cancer of Multiple Primary Gynecologic Organs

TABLE 36: Cancer of the Multiple Primary Gynecologic Organs 2017

Data	Case 1 CA Corpus + CA Ovary	Case 2 CA Corpus + CA Ovary	Case 3 CA Ovary + CA Tube
Age	59	46	65
Marital status	Married	Married	Married
Parity	1-0-0-1	1-0-0-1	2-0-0-2
Presenting symptoms	Abdominal distension, abnormal bleeding/vagina	Abnormal bleeding/vagina	Pelvic pain
Stage	CA corpus: IA grade 1 CA ovary: IIB	CA corpus: IA grade 2 CA ovary: IC1	CA Ovary: IIIC CA Tube: IC
Histology	Corpus: Endometrioid CA grade 1 Ovary: Endometrioid CA grade 1	Corpus: Endometrioid CA grade 2 Ovary: Endometrioid CA grade 1	Ovary: High grade serous adeno CA Tube: Serous tubal intraepithelial CA
Treatment	TAH, BSO, BPND, partial omentectomy, ascites collection + PT	TAH, BSO, BPND, partial omentectomy, peritoneum biopsy + PT	TAH, BSO, omental biopsy, lysis adhesion
Outcome	Under follow up without disease	Under follow up without disease	During treatment

CA = carcinoma
PT = Paclitaxel and Carboplatin
CT = Chemotherapy
CCRT = Concurrent chemoradiation
TAH&BSO = Total abdominal hysterectomy and bilateral salpingo-oophorectomy
BPND = Bilateral pelvic node dissection
PANS = Paraaortic node sampling
MD = Moderately differentiated
SCCA = Squamous cell carcinoma

Data	Case 4 CA Corpus + CA Cervix	Case 5 CA Corpus + CA Cervix	Case 6 CA Corpus + CA Bladder
Age	59	62	67
Marital status	Married	Married	Married
Parity	1-0-0-1	2-0-0-2	3-0-1-3
Presenting symptoms	Pelvic mass	Pelvic mass c peritonitis	Abnormal bleeding/vagina
Stage	CA Corpus: IA CA Cervix: IB1	CA Corpus: IA CA Cervix: IIIA	CA Corpus: IVA CA Bladder: IV
Histology	Corpus: Endometrioid CA grade.1 Cervix: SCCA, MD	Corpus: Endometrioid CA grade.1 Cervix: MD endocervical adeno CA	Corpus: Endometrioid CA gr.1 Bladder: Papillary urothelial CA
Treatment	TAH, BSO, BPND, partial omentectomy + CCRT	TAH, BSO, BPND, partial omentectomy + WPRT + VBT	Cisplatin + 5FU x5 + TURBT + PT
Outcome	During treatment	During treatment	During treatment

Gestational Trophoblastic Disease

- Gestational Trophoblastic Tumor
- Molar Pregnancy

TABLE 37: Gestational Trophoblastic Tumors in 2017

No	HN	Age (yr)	Initial HCG titer	Prognosis Classification	Diagnosis	FIGO	Treatment	Result
1	2478161	35	2,201	Met, Poor prog Lung, brain	Choriocarcinoma Pathological result from craniotomy to remove tumor 20/7/60	IV	EMA/EPx1 > TP/EP x1 > ICE	During treatment
2	2892980	45	45.5	NMGTT	Persistent mole	I	MTX x5	remission
3	2954379	39	28.88	NMGTT	Persistent invasive mole s/p TAH		Actinomycin D	During treatment
4	3779065	27	9,090	Met, Poor prog Lung	GTN	III	MTX x > EMA-CO x5> TP/TE x4 > ICE x3	During treatment
5	3787186	50	2,551	NMGTT	Persistent mole	I	MTX x9	remission
6	3794317	50	5,471	Met, good prog Lung	Persistent mole	III	MTX x3 > Act D x3	remission
7	3797844	22	525.8	NMGTT	Persistent mole		MTX x1	Lost to FU
8	3800594	17	1,312	NMGTT	Invasive mole	I	MTX x1 > Act D x4	remission
9	3811245	48	495,650	Met, good prog Lung	Invasive mole	III	EMA x3 > MVA > MTX x2 > Act D	During treatment
10	3815324	46	2,952	NMGTT	Post molar GTN	I	MTX x7	remission
11	3817753	32	52,356	Met, Poor prog Ovary	Choriocarcinoma Patho from D&C	IV	Act D x1 > EMA x2 > EMA-CO	During treatment
12	3824098	23	1,984,121	Met, Poor prog Lung	Post molar GTN	III	EMA-CO	During treatment
13	3825259	27	28,252	NMGTT	Persistent mole	I	MTX x7 > Act D	During treatment
14	3837067	46	49,772	NMGTT	Post molar GTN	I	MTX	During treatment
15	3838478	31	111,217	Met, Poor prog Lung	Post molar GTN	III	EMA-CO	During treatment
16	3843761	50	386.60	NMGTT	Invasive mole	I	MTX	During treatment

MGTT = Metastatic Gestational Trophoblastic tumor
NMGTT = Non-metastatic Gestational Trophoblastic tumor
EMA = Etoposide + Methotrexate + Actinomycin D
EMA-CO = Etoposide + Methotrexate + Actinomycin D + Cyclophosphamide+ Vincristine
MTX = Methotrexate
S&C = Suction curettage
ICE = Ifosfamide + Cisplatin + Etoposide
CT = Chemotherapy
TP/EP = Paclitaxel +Cisplatin/ Paclitaxel + Etoposide

TABLE 38: Molar Pregnancy in 2017

No	Age	Gravida	GA (wk)	Uterine size (wk)	HCG titer	Risk	Treatment	Pathology	Result
1	45	G3 P2	7+	8	129,064	High	S&C	Complete hydatidiform mole	Persistent mole
2	50	G3P2	16	14	50,126	High	S&C	Complete hydatidiform mole	Persistent mole

FU = Follow-up

GA = Gestational age

Cancer of Other Gynecologic Organs

TABLE 34: Cancer of other gynecologic organs

Data	**Case 1**
Age	54
Marital status	married
Parity	1-0-0-1
Presenting symptoms	Vaginal pain
Histology	Clear cell adeno CA arising in broad ligament endometriotic cyst
Treatment	NAC x3 > TAH (s/p BSO due to endometriotic cyst),debulking tumor + PT
Outcome	During treatment

CA = Carcinoma
TAH&BSO = Total abdominal hysterectomy and bilateral salpingo- oophorectomy
PT = Paclitaxel and Carboplatin

SECTION II

- **Medical Personnel and Facilities**
- **Diagnostic Procedures and Gynecologic Oncology Operations**
- **Publications & Presentations**

Medical Personnel and Facilities

TABLE 39: Medical Personnel and Facilities in Division of Gynecologic Oncology, Chiang Mai University

Personnel and Facilities	Number
Medical doctor	8
General nurse	21
Practical nurse	11
Helper	8
Research nurse	2
Research assistant	1
Inpatient bed	20
One-day chemotherapy bed	19
Outpatient bed	7
Colposcope	3
Cryosurgery set	1
Radiosurgery (Surgitron)	3

Funds (**กองทุนของหน่วยมะเร็งวิทยานรีเวช**)

1. Gynecologic Cancer Fund **(** กองทุนมะเร็งทางนรีเวช)
2. Cervical Cancer Surgery Fund (กองทุนผ่าตัดมะเร็งปากมดลูก)

1st Year Fellow

- Dhammapoj Jeerakornpassawat, MD
- Nopwaree Chantawong, MD
- Ornwisanate Mongkolmafai, MD

2nd Year Fellow

- Chalaithorn Nantasupha, M.D.
- Dangcheewan Tinnangwattana, MD
- Uraiwan Khomphaiboonkij, MD

Radiation Oncologists

1. Associate Professor Imjai Chitapanarux, MD
2. Assistant Professor Ekkasit Tharavijitkul, MD
3. Somwilai Mayurasakorn, MD
4. Pitchayaponne Klunklin, MD
5. Wimrak Onchan, MD

Gynecologic Pathologists

1. Associate Professor Sumalee Siriaunkgul, MD
2. Associate Professor Surapan Khunamornpong, MD
3. Associate Professor Jongkolnee Settakorn, MD
4. Assistant Professor Kornkanok Sukapan, MD
5. Tip Pongsuwareeyakul, MD

Medical Oncologists

1. Assistant Professor Busyamas Chewaskulyong, MD
2. Associate Professor Chaiyut Charoentum, MD
3. Thatthamn Suksomboon charoen, MD

PUBLICATIONS & PRESENTATIONS

2017

Prognostic Value of Tumor Budding in Early-Stage Cervical Adenocarcinomas

Satabongkoch N, Khunamornpong S, Pongsuvareeyakul T, Settakorn J, Sukpan K, Soongkhaw A, intaraphet S, Suprasert P, Siriaunkgul S.

Asian Pac J Cancer Prev 2017;18(6):1717-22.

BACKGROUND:

Tumor budding has recently been reported as an independent adverse prognostic factor for colorectal adenocarcinomas and other types of carcinoma in the digestive tract. This study aimed to evaluate the prognostic value of tumor budding in patients with early-stage cervical adenocarcinomas and any associations with other clinical and pathological features.

METHODS:

Histological slides of patients with early-stage (IB-IIA) usual-type endocervical adenocarcinoma who underwent radical hysterectomy and pelvic lymph node dissection, without preoperative chemotherapy, between January 2006 and December 2012 were reviewed. Tumor budding was evaluated in routinely-stained sections and defined as detached single cells or clusters of fewer than 5 cells in a tumor invasive front and was stratified based on the number of bud counts in 10-high-power fields as low (<15 buds) and high (≥15 buds). Correlations between tumor bud count and other clinical and pathological variables including follow-up outcomes were assessed.

RESULTS:

Of 129 patients, a high tumor bud count was observed in 15 (11.6%), positively associated with histologic grade 3 ($p<0.001$), invasive pattern C (Silva System) ($p=0.004$), lymph node metastasis ($p=0.008$), stage IB2-IIA ($p=0.016$), and tumor size >2 cm ($p=0.036$). Kaplan-Meyer analysis showed a significant decrease in both disease-free survival and cancer-specific survival for patients with a high tumor bud count ($p=0.027$ and 0.031, respectively). On multivariate analysis, histologic grade 3 was the only independent predictor for decreased disease-free survival ($p=0.004$) and cancer-specific survival ($p=0.003$).

CONCLUSIONS:

A high tumor budding count based on assessment of routinely-stained sections was found to be associated with decreased disease-free and cancer-specific survival in patients with early-stage cervical adenocarcinomas. However, it was not found to be an independent prognostic predictor in this study.

Randomized, Controlled Trial of Dexamethasone Versus Dexamethasone PlusHydrocortisone as Prophylaxis for Hyp ersensitivity Reactions Due to Paclitaxel Treatment for Gynecologic Cancer

Jeerakornpassawat D, Suprasert P.

Int J Gynecol Cancer 2017;27(8):1794-1801.

OBJECTIVE:

The aim of this study was to assess intravenous hydrocortisone (HCT) added to standard dexamethasone (DXM) prophylaxis for paclitaxel-associated hypersensitivity reactions (HSRs).

METHODS:

Paclitaxel naives scheduled for 6 cycles of paclitaxel (plus platinum) were randomized to DXM alone (20 mg intravenously [IV]) versus DXM plus HCT (100 mg IV) as premedication including chlorpheniramine (10 mg IV), diphenhydramine (25 mg orally), and ranitidine (50 mg IV) 30 minutes before infusion. Clinic nurses observed for HSRs. Groups were well balanced for cancer type, stage, drug allergy, chemotherapy naivete, mean age, body mass index, and paclitaxel dose.

RESULTS:

The 44 DXM controls underwent 213 cycles and the 42 investigational DXM plus HCT group 192 per protocol cycles. Hypersensitivity reactions were observed among 9 (4.2%) DXM only cycles compared with 1 (0.5%) among DXM plus HCT cycles (P = 0.022). Hypersensitivity reactions occurred in 8 (18%) DXM only patients and in 1 (2.4%) among those correctly receiving DXM plus HCT (P = 0.030). All HSRs occurred in cycles 1 to 3, within 10 to 40 minutes after infusion initiation, and peaked in cycle 2 (5/39) for DXM recipients and in cycle 3 (1/30) for DXM plus HCT. Hypersensitivity reaction severity was grade 1 in 3 DXM only recipients and grade 2 in 6 DXM and 1 DXM plus HCT. A sole grade 3 HSR was in an intention-to-treat DXM-HCT patient, who erroneously received no HCT. Hypersensitivity reaction symptoms were facial flushing (8 episodes), dyspnea (7), palmar rash (1), and transient hypotension (1). Paclitaxel infusion was suspended for treatment of HSRs; in all cases, symptoms mitigated and infusion successfully restarted for the remaining dose.

CONCLUSIONS:

Adding HCT to routine DXM prophylaxis significantly decreased paclitaxel HSR frequency.

Effects of Music Listening During Loop Electrosurgical Excision Procedureon Pain and Anxiety:A Randomized Trial

Chantawong N, Charoenkwan K.

J Low Genit Tract Dis 2017;21(4):307-10.

OBJECTIVE:

The aim of the study was to compare pain, anxiety, and satisfaction between women, who listened to music, and those who did not during loop electrosurgical excision procedure (LEEP).

MATERIAL AND METHODS:

Participants were randomly assigned into two groups. In group 1 (music), the participants listened to relaxing instrumental music through the stereo headset from the time of arrival at the preoperative waiting room until the procedure completed. For group 2 (control), the participants underwent LEEP without music listening. The women rated pain, anxiety, and satisfaction according to 10-cm visual analog scales. Pain was assessed at the time of speculum insertion (baseline pain) and immediately after the LEEP completed (procedural pain). Anxiety and satisfaction were examined just before starting the LEEP and 10 minutes after the procedure completed.

RESULTS:

One hundred fifty patients (74 in music group and 76 in control group) participated. Mean baseline pain scores after speculum insertion were comparable between the groups (3.7 in the music group vs. 3.5 in the control group, p = .55). Mean procedural pain scores were not different between the groups (4.7 in the music group vs. 5.2 in the control group, p = .32). The differences of the procedural pain scores from baseline were statistically comparable between the study groups (0.9 in the music group vs. 1.7 in the control group, p = .15). There were no significant differences in anxiety and satisfaction scores at any time points assessed between the groups.

CONCLUSIONS:

The effects of music listening on reducing pain and anxiety during LEEP could not be demonstrated in this study.

Retroperitoneal Drainage versus No Drainage after Pelvic Lymphadenectomy for The Prevention of Lymphocyst Formation in Women with Gynaecological Malignancies

Charoenkwan K, Kietpeerakool C.

Cochrane Database Syst Rev 2017;6:CD007387.

BACKGROUND:

This is an updated version of an original Cochrane review published in Issue 6, 2014. Pelvic lymphadenectomy is associated with significant complications including lymphocyst formation and related morbidities. Retroperitoneal drainage using suction drains has been recommended as a method to prevent such complications. However, findings from recent studies have challenged this policy.

OBJECTIVES:

To assess the effects

of retroperitoneal drainage versus no drainage after pelviclymphadenectomy on lymphocyst formation and related morbidities in women with gynaecological cancer.

SEARCH METHODS:

We searched the Cochrane Central Register of Controlled Trials (CENTRAL, Issue 3, 2017) in the Cochrane Library, electronic databases MEDLINE (1946 to March Week 2, 2017), Embase (1980 to 2017 week 12), and the citation lists of relevant publications. We also searched the trial registries for ongoing trials on 20 May 2017.

SELECTION CRITERIA:

Randomised controlled trials (RCTs) that compared the effect

of retroperitonealdrainage versus no drainage after pelvic lymphadenectomy in women with gynaecological cancer. Retroperi toneal drainage was defined as placement of passive or active suction drains in pelvic retroperitoneal spaces.

No drainage was defined as no placement of passive or active suction drains in pelvic retroperitoneal spaces.

DATA COLLECTION AND ANALYSIS:

We assessed studies using methodological quality criteria. For dichotomous data, we calculated risk ratios (RRs) and 95% confidence intervals (CIs). We examined continuous data using mean difference (MD) and 95% CI.

MAIN RESULTS:

Since the last version of this review, we have identified no new studies for inclusion. The review included four studies with 571 women. Regarding short-term outcomes (within four weeks after surgery), retroperitoneal drainage was associated with a comparable rate of overall lymphocyst formation when all methods of pelvic peritoneum management were considered together (2 studies; 204 women; RR 0.76, 95% CI 0.04 to 13.35; moderate-quality evidence). When the pelvic peritoneum was left open, the rates of overall lymphocyst formation (1 study; 110 women; RR 2.29, 95% CI 1.38 to 3.79) and symptomatic lymphocyst formation (2 studies; 237 women; RR 3.25, 95% CI 1.26 to 8.37) were higher in the drained group. At 12 months after surgery, the rates of overall lymphocyst formation were comparable between the groups (1 study; 232 women; RR 1.48, 95% CI 0.89 to 2.45; high-quality evidence). However, there was a trend toward increased risk of symptomatic lymphocyst formation in the group with drains (1 study; 232 women; RR 7.12, 95% CI 0.89 to 56.97; low-quality evidence).

AUTHORS' CONCLUSIONS:

Placement of retroperitoneal tube drains has no benefit in prevention of lymphocyst formation after pelvic lymphadenectomy in women with gynaecological malignancies. When the pelvic peritoneum is left open, the tube drain placement is associated with a higher risk of short- and long-term symptomatic lymphocyst formation. We found the quality of evidence using the GRADE approach to be moderate to high for most outcomes, except for symptomatic lymphocyst formation at 12 months after surgery, and unclear or low risk of bias.

Effect of Lidocaine Spray during Colposcopy-Directed Cervical Biopsy: A Randomized Controlled Trial

Wongluecha T, Tantipalakorn C, Charoenkwan K, Srisomboon J.

J Obstet Gynaecol Res 2017;43(9):1460-4.

AIM:

We aimed to examine the effect of lidocaine spray in reducing pain during colposcopy-directed cervical biopsy (CDB).

METHODS:

Two hundred women with abnormal cervical screening test results and abnormal colposcopic findings that required a CDB during April to December 2015 were enrolled. The participants were randomly assigned into one of two groups. For group 1 (lidocaine group), 10% lidocaine spray was applied thoroughly to the ectocervix. For group 2, no anesthesia was given. The primary outcome of this study was the biopsy pain score.

RESULTS:

Of the 200 women enrolled, 100 were randomly assigned to group 1 and 100 were in group 2. The baseline, biopsy, and postprocedure pain scores were comparable between the study groups. The mean difference between the biopsy and the baseline pain scores and the mean difference of the postprocedure pain scores from baseline were statistically significantly higher in the no-anesthesia group (group 2), P = 0.01 and P = 0.02, respectively. However, the degree of pain was minimal in both groups. There were no complications observed in any participants.

CONCLUSION:

Lidocaine spray reduces pain during colposcopy-directed cervical biopsy; however, the clinically meaningful effect of such a procedure cannot be demonstrated in this study.

Scalpel versus Electrosurgery for Major Abdominal Incisions

Charoenkwan K, Iheozor-Ejiofor Z, Rerkasem K, Matovinovic E.

Cochrane Database Syst Rev 2017;6:CD005987.

BACKGROUND:

Scalpels or electrosurgery can be used to make abdominal incisions. The potential benefits of electrosurgery may include reduced blood loss, dry and rapid separation of tissue, and reduced risk of cutting injury to surgeons. Postsurgery risks possibly associated with electrosurgery may include poor wound healing and complications such as surgical site infection.

OBJECTIVES:

To assess the effects of electrosurgery compared with scalpel for major abdominal incisions.

SEARCH METHODS:

The first version of this review included studies published up to February 2012. In October 2016, for this first update, we searched the Cochrane Wounds Specialised Register, the Cochrane Central Register of Controlled Trials (CENTRAL), Ovid MEDLINE (including In-Process & Other Non-Indexed Citations), Ovid Embase, EBSCO CINAHL Plus, and the registry for ongoing trials (www.clinicaltrials.gov). We did not apply date or language restrictions.

SELECTION CRITERIA:

Studies considered in this analysis were randomised controlled trials (RCTs) that compared electrosurgery to scalpel for creating abdominal incisions during major open abdominal surgery. Incisions could be any orientation (vertical, oblique, or transverse) and surgical setting (elective or emergency). Electrosurgical incisions were made through major layers of the abdominal wall, including subcutaneous tissue and the musculoaponeurosis (a sheet of connective tissue that attaches muscles), regardless of the technique used to incise the skin and peritoneum. Scalpel incisions were made through major layers of abdominal wall including skin, subcutaneous tissue, and musculoaponeurosis, regardless of the technique used to incise the abdominal peritoneum. Primary outcomes analysed were wound infection, time to wound healing, and wound dehiscence. Secondary outcomes were postoperative pain, wound incision time, wound-related blood loss, and adhesion or scar formation.

DATA COLLECTION AND ANALYSIS:

Two review authors independently carried out study selection, data extraction, and risk of bias assessment. When necessary, we contacted trial authors for missing data. We calculated risk ratios (RR) and 95% confidence intervals (CI) for dichotomous data, and mean differences (MD) and 95% CI for continuous data.

MAIN RESULTS:

The updated search found seven additional RCTs making a total of 16 included studies (2769 participants). All studies compared electrosurgery to scalpel and were considered in one comparison. Eleven studies, analysing 2178 participants, reported on wound infection. There was no clear difference in wound infections between electrosurgery and scalpel (7.7% for electrosurgery versus 7.4% for scalpel; RR 1.07, 95% CI 0.74 to 1.54; low-certainty evidence downgraded for risk of bias and serious imprecision). None of the included studies reported time to wound healing. It is uncertain whether electrosurgery decreases wound dehiscence compared to scalpel (2.7% for electrosurgery versus 2.4% for scalpel;

RR 1.21, 95% CI 0.58 to 2.50; 1064 participants; 6 studies; very low-certainty evidence downgraded for risk of bias and very serious imprecision). There was no clinically important difference in incision time between electrosurgery and scalpel (MD -45.74 seconds, 95% CI -88.41 to -3.07; 325 participants; 4 studies; moderate-certainty evidence downgraded for serious imprecision). There was no clear difference in incision time per wound area between electrosurgery and scalpel (MD -0.58 seconds/cm^2, 95% CI -1.26 to 0.09; 282 participants; 3 studies; low-certainty evidence downgraded for very serious imprecision). There was no clinically important difference in mean blood loss between electrosurgery and scalpel (MD -20.10 mL, 95% CI -28.16 to -12.05; 241 participants; 3 studies; moderate-certainty evidence downgraded for serious imprecision). Two studies reported on mean wound-related blood loss per wound area; however, we were unable to pool the studies due to considerable heterogeneity. It was uncertain whether electrosurgery decreased wound-related blood loss per wound area. We could not reach a conclusion on the effects of the two interventions on pain and appearance of scars for various reasons such as small number of studies, insufficient data, the presence of conflicting data, and different measurement methods.

AUTHORS' CONCLUSIONS:

The certainty of evidence was moderate to very low due to risk of bias and imprecise results. Low-certainty evidence shows no clear difference in wound infection between the scalpel and electrosurgery. There is a need for more research to determine the relative effectiveness of scalpel compared with electrosurgery for major abdominal incisions.

Exploring Oral Cancer Patients' Preference in Medical Decision Making and Quality of Life

Cheng SL, Liao HH, Shueng PW, Lee HC, Cheewakriangkrai C, Chang CC.

Stud Health Technol Inform 2017;238:32-5.

Little is known about the clinical effects of shared medical decision making (SMDM) associated with quality of life about oral cancer? To understand patients who occurred potential cause of SMDM and extended to explore the interrelated components of quality of life for providing patients with potential adaptation of early assessment. All consenting patients completed the SMDM questionnaire and 36-Item Short Form (SF-36). Regression analyses were conducted to find predictors of quality of life among oral cancer patients. The proposed model predicted 57.4% of the variance in patients' SF-36 Mental Component scores. Patient mental component summary scores were associated with smoking habit (β=-0.3449, p=0.022), autonomy (β=-0.226, p=0.018) and Control preference (β=-0.388, p=0.007). The proposed model predicted 42.6% of the variance in patients' SF-36 Physical component scores. Patient physical component summary scores were associated with higher education (β=0.288, p=0.007), employment status (β=-0.225, p=0.033), involvement perceived (β=-0.606, p=0.011) and Risk communication (β=-0.558, p=0.019). Future research is necessary to determine whether oral cancer patients would benefit from early screening and intervention to address shared medical decision making.

Decisional Conflict in Work-Related Hand Trauma Patients

Liao HH, Cheng SL, Shueng PW, Lee HC, Cheewakriangkrai C, Chang CC.

Stud Health Technol Inform 2017;238:40-3.

Often, clinical decision making of reconstructive procedure is coupled and their concurrent resolution by interacting stakeholders is required. This study was to give new insight into the tradeoff method to elicit the utility function first and then the probability weighting function, to determine if and how stakeholder engagement can contribute to managing decisional conflict processes. The proposed methodology is illustrated through three subjects (physician, patient and family member). We found that significant evidence of probability weighting both at the aggregate level and at the individual subject level. The pattern of probability weights is consistent with an inverse shaped probability weighting function: Small probabilities are overweighed and intermediate and large probabilities are underweight. In addition, the degree of upper subadditivity exceeds the degree of lower subadditivity. Finally, the proposed procedure can reduce clinical risk by considering stakeholders' behavior attribute and providing physicians the effective support need for quality decision making.

Integration of Data Mining Classification Techniques and Ensemble Learning to Identify Risk Factors and Diagnose Ovarian Cancer Recurrence

Tseng CJ, Lu CJ, Chang CC, Chen GD, Cheewakriangkrai C.

Artif Intell Med 2017;78:47-54.

Ovarian cancer is the second leading cause of deaths among gynecologic cancers in the world. Approximately 90% of women with ovarian cancer reported having symptoms long before a diagnosis was made. Literature shows that recurrence should be predicted with regard to their personal risk factors and the clinical symptoms of this devastating cancer. In this study, ensemble learning and five data mining approaches, including support vector machine (SVM), C5.0, extreme learning machine (ELM), multivariate adaptive regression splines (MARS), and random forest (RF), were integrated to rank the importance of risk factors and diagnose the recurrence of ovarian cancer. The medical records and pathologic status were extracted from the Chung Shan Medical University Hospital Tumor Registry. Experimental results illustrated that the integrated C5.0 model is a superior approach in predicting the recurrence of ovarian cancer. Moreover, the classification accuracies of C5.0, ELM, MARS, RF, and SVM indeed increased after using the selected important risk factors as predictors. Our findings suggest that The International Federation of Gynecology and Obstetrics (FIGO), Pathologic M, Age, and Pathologic T were the four most critical risk factors for ovarian cancer recurrence. In summary, the above information can support the important influence of personality and clinical symptom representations on all phases of guide interventions, with the complexities of multiple symptoms associated with ovarian cancer in all phases of the recurrent trajectory.

Relationships of Ex-Vivo Drug Resistance Assay and Cytokine Production with Clinicopathological Features in the Primary Cell Culture of Thai Ovarian and Fallopian Tube Cancer Patients

Mon MT, Yodkeeree S, Punfa W, Umsumarng S, Lekwanavijit S, Siriaunkgul S, Suprasert P, Limtrakul P.

Asian Pac J Cancer Prev 2017;18(11):3063-71.

OBJECTIVE:

Our goal was to determine the ex-vivo drug resistance assay, as well as the cytokine production, in response to platinum-based chemotherapy treatment in primary culture cells established from the tumor tissue of ovarian or fallopian tube carcinoma patients, and to predict the clinical responses to chemotherapy.

METHODS:

Sensitivity to the platinum-based drug was analyzed in two ovarian cancer cell lines and 19 tumor samples using the primary cell culture obtained from 19 patients having ovarian or fallopian tube cancer that had undergone surgery from 2014 to 2017.

RESULTS:

Our findings in the ovarian cancer cell lines showed that SKOV3 cells displayed 10-fold greater resistance to cisplatin and 5.8 times more resistance to carboplatin than A2780 cells. SKOV3 cells displayed platinum-induced IL-6 and IL-8 overproduction whereas wild type A2780 displayed no detectable cytokine production. Regarding the primary cell culture obtained from patients, ex-vivo drug resistance assay results revealed that although extreme drug resistance was correlated with late stage ovarian cancer (P= 0.031), it could not independently predict or alter the outcomes of patients with ovarian or fallopian tube cancer. No relationship was found between basal cytokine secretion and the clinical parameters. However, carboplatin-induced IL-6 and IL-8 production had a significant association with the clinical response to chemotherapy (P=0.016 and P=0.038 respectively). Carboplatin-induced IL-8 overproduction was correlated with FIGO staging III-IV (P=0.026), but no correlation between carboplatin-induced IL-6 and FIGO staging (P= 0.061) was noted.

CONCLUSION:

These results suggest that cytokine production in response to platinum-based chemotherapy in primary culture cells may be useful as a predictive marker for the therapeutic outcomes among ovarian or fallopian tube cancer patients.

Comparison of Hypersensitivity Reactions to Carboplatin Retreatment in Gynecologic Cancer Patients between One and Two-Hour Infusions: A Randomized Trial Study

Pornwattanakrilert W, Suprasert P.

Asian Pac J Cancer Prev 2017;18(2):425-30.

OBJECTIVE:

To compare the incidence rate of carboplatin hypersensitivity reactions (HSRs) in gynecologic cancer patients receiving one-hour or two-hour carboplatin retreatment infusions.

SETTING:

A Prospective Randomized Controlled Trial.

METHODS:

Recurrent gynecologic cancer patients 25 to 80-years of age who were scheduled to receive carboplatin retreatment after previously receiving at least six cycles of carboplatin without a history of platinum allergy were invited to enroll. They were randomized to receive either a one-hour or two-hour carboplatin infusion in each cycle. The nurses recorded any occurrence of HSR. Patients who developed carboplatin HSR were discontinued from the study.

RESULTS:

Forty-five patients were enrolled and randomized to receive either a one-hour carboplatin infusion arm in 69 cycles or a two-hour infusion arm in 67 cycles. Both groups were well balanced regarding median age, body mass index, type of cancer, history of drug allergy, median platinum free interval time, median total number of previous carboplatin cycles, premedication type, regimen and median total dose of carboplatin. Five (3.67%) of the 136 cycles resulted in carboplatin HSR, all of which were Grade 1. Of these, four cycles developed HSR during the one-hour infusion and only one cycle with a two-hour infusion (P=0.37). The onset of carboplatin HSR occurred within 30-105 minutes after infusion start.

CONCLUSION:

Extending the carboplatin infusion time to two hours from one hour did not significantly decrease carboplatin HSR.

Appropriate Bowel Preparation for Laparotomy Gynecologic Surgery: A Prospective, Surgeon-Blinded Randomized Study.

Suadee W, Suprasert P.

Gynecol Obstet Invest 2017;82(3):287-93.

OBJECTIVE:

To compare the surgeon's satisfaction during gynecological laparotomy surgery and patient's satisfaction as well as quality of life (QOL) among 3 groups of bowel preparations: no enema vs. sodium chloride enema vs. soap-suds enema (SSE).

MATERIALS AND METHOD:

Three hundred and thirty-three women undergoing gynecological laparotomy surgery and without risks to bowel lumen entry between November 2014 and October 2015 were randomized to receive no enema (n = 111), sodium chloride enema (n = 111) or SSE (n = 111) for bowel preparation. Surgeons, who were blinded for the type of bowel preparation, assessed the surgical visualization and the efficacy of bowel packing. The patients' satisfaction and the QOL were also assessed on the days of admission, operation, post-operation, and discharge.

RESULTS:

The patients' features of the 3 groups were well balanced. The surgeon's satisfaction was rated excellent as 56.8, 63.1 and 65.8% in the no-enema, sodium chloride and SSE groups (p = 0.830), respectively. The patients in the no-bowel-preparation group were satisfied more significantly than the other groups (p = 0.001). No significant differences in QOL were observed among the 3 groups.

CONCLUSION:

The type of bowel preparation for exploratory gynecologic surgery did not affect the surgical visualization and the QOL of the patients.

Sonographic Diagnosis of Tubal Cancer with IOTA Simple Rules Plus Pattern Recognition

Tongsong T, Wanapirak C, Tantipalakorn C, Tinnangwattana D.

Asian Pac J Cancer Prev 2017;18(11):3011-5.

OBJECTIVE:

To evaluate diagnostic performance of IOTA simple rules plus pattern recognition in predicting tubal cancer.

METHODS:

Secondary analysis was performed on prospective database of our IOTA project. The patients recruited in the project were those who were scheduled for pelvic surgery due to adnexal masses. The patients underwent ultrasound examinations within 24 hours before surgery. On ultrasound examination, the masses were evaluated using the well-established IOTA simple rules plus pattern recognition (sausage-shaped appearance, incomplete septum, visible ipsilateral ovaries) to predict tubal cancer. The gold standard diagnosis was based on histological findings or operative findings.

RESULTS:

A total of 482 patients, including 15 cases of tubal cancer, were evaluated by ultrasound preoperatively. The IOTA simple rules plus pattern recognition gave a sensitivity of 86.7% (13 in 15) and specificity of 97.4%. Sausage-shaped appearance was identified in nearly all cases (14 in 15). Incomplete septa and normal ovaries could be identified in 33.3% and 40%, respectively.

CONCLUSION:

IOTA simple rules plus pattern recognition is relatively effective in predicting tubal cancer. Thus, we propose the simple scheme in diagnosis of tubal cancer as follows. First of all, the adnexal masses are evaluated with IOTA simple rules. If the B-rules could be applied, tubal cancer is reliably excluded. If the M-rules could be applied or the result is inconclusive, careful delineation of the mass with pattern recognition should be performed.

International Research PRESENTATIONS

2017

The 5th Biennial Meeting of Asian Society of Gynecologic Oncology (ASGO 2017) November 30–December 2, 2017, Otemachi Sankei Plaza, Tokyo, Japan

PREDICTING FACTORS FOR RESUMPTION OF SPONTANEOUS VOIDING FOLLOWING NERVE-SPARING RADICAL HYSTERECTOMY

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Objective: To determine factors affecting spontaneous voiding recovery on the day of Foley catheter removal (post operation day 7, POD7) after nerve-sparing radical hysterectomy for early-stage cervical cancer.

Methods: Women diagnosed with early-stage cervical cancer and underwent radical hysterectomy between January 2006 and June 2016 were recruited. Demographic characteristics, clinical data, operative data, and histopathological report were collected. Association between spontaneous voiding on POD7 and potential clinico-pathological predicting factors were evaluated in univariable and multivariable analysis.

Results: Of 830 patients, 446 (53.7%) resumed spontaneous voiding on POD7. Median voiding volume on POD7 was 227.3 ml (0-833 ml). Median post void residual urine volume was 91.0 ml (0-1050 ml). In univariable analysis, factors associated with lower rate of resumption of spontaneous voiding included postoperative urinary tract infection (42.2% vs. 56.5%, p=0.001), FIGO stage IB2&IIA (44.8% vs. 57.0%, p=0.001), preoperative chemotherapy (42.4% vs. 55.7%, p=0.006), class 3 hysterectomy (50.9% vs. 83.6%, p<0.001), tumor size $\geq$ 4 cm (36.8% vs. 57.1%, p<0.001), gross tumor (48.1% vs. 64.2%, p<0.001), and primary surgeon. In multivariable analysis, tumor size, class of hysterectomy, and primary surgeon were independent predictors of resumption of spontaneous voiding on POD7.

Conclusion: Extent of disease represented by tumor size and class of hysterectomy as well as individual surgeon's technique independently predict resumption of spontaneous voiding on POD7 following nerve-sparing radical hysterectomy.

PREOPERATIVE PREDICTION MODEL FOR PARAMETRIAL INVASION IN WOMEN WITH EARLY-STAGE CERVICAL CANCER

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Objective: 1) To examine the association between clinicopathological factors and parametrial invasion (PI) in early-stage cervical cancer. 2) To develop preoperative prediction model for PI in women with early-stage cervical cancer undergoing planned radical surgery.

Methods: After ethical approval, clinical, surgical, and pathological data of all patients with FIGO stage IA-IIA cervical cancer, who had radical hysterectomy at our institution from January 2003 to June 2016 were reviewed. Logistic regression model was applied in a multivariable analysis to determine independent predicting factors for PI.

Results: Of 1,498 patients included, 257 (17.2%) had PI. Prevalence of PI were 22.8% (216/948) in patients with gross disease and 7.5% (41/550) in those with microscopic lesion ($p<0.001$). For patients with gross disease, pelvic node metastasis ($p<0.001$), depth of stromal invasion ($p>0.001$), tumor size ($p>0.001$), uterine metastasis ($p<0.01$), lymph-vascular space invasion (LVSI) ($p=0.01$), tumor appearance ($p=0.01$), and preoperative chemotherapy ($p=0.03$) were significantly associated with PI in multivariable analysis. For patients with microscopic lesion, pelvic node metastasis ($p<0.01$), depth of invasion ($p=0.01$), and LVSI ($p=0.03$) were independent predicting factors for PI in multivariable analysis.

Conclusion: Pelvic node metastasis, depth of stromal invasion, and LVSI are predictive for PI in both patients with gross disease and those with microscopic lesion. For patients with gross disease, tumor size, tumor appearance, and uterine metastasis are also independent predicting factors for PI. Based on these data, factors that are preoperatively identifiable can be combined in a scoring system for more accurate prediction of risk of PI in individual patient.

EFFECTIVENESS AND SAFETY OF RADICAL PARAMETRECTOMY AND PELVIC LYMPHADENECTOMY FOR OCCULT INVASIVE CERVICAL CARCINOMA FOUND AFTER INADVERTENT SIMPLE HYSTERECTOMY

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Objective: To examine effectiveness and safety of radical parametrectomy (RP) and pelvic lymphadenectomy (PL) in patients with occult invasive cervical carcinoma following inadvertent simple hysterectomy.

Methods: Women diagnosed with early-stage cervical cancer (FIGO stage IA-IIA) who had undergone simple hysterectomy and had received further evaluation and management at our institution from January 2006 to December 2016 were recruited. Demographic characteristics, clinical data, operative data, histopathological report, and survival outcomes were collected.

Results: Of 16 patients, 2 had stage IA2 disease (12.5%) and 14 had stage IB1 disease (87.5%). Median age was 43 years (32-61 years). Thirteen patients (81.3%) had squamous cell carcinoma while 3 patients (18.8%) had adenocarcinoma. The surgery was performed through laparotomy in 13 patients (81.3%) and laparoscopy in 3 patients (18.8%). During the operation, an average of 24.5 pelvic lymph nodes were resected (8-40 nodes). Median operative time was 256.0 minutes (188-730 minutes). Mean blood loss was 693.3 ml (200-1,600 ml). Two patients (12.5%) had accidental tear of urinary bladder. Pelvic node metastasis was found in two patients (12.5%), both with stage IB1 disease. These patients received postoperative adjuvant whole pelvic radiation. There were no parametrial invasion and positive vaginal margin identified. Median follow-up time was 14.4 months. There were no documented recurrence and all patients are currently alive.

Conclusion: Radical surgery with the combination of RP and PL is an acceptable treatment options for patients with occult invasive cervical carcinoma who had inadvertent simple hysterectomy. With careful patient selection, the need for postoperative radiation is uncommon.

SURVIVAL OUTCOMES OF SEX CORD-STROMAL TUMORS OF THE OVARY

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Objective: To evaluate the clinico-pathological characteristics and the survival outcomes of malignant ovarian sex cord-stromal tumors (SCSTs).

Methods: Patients with malignant SCSTs of the ovary who underwent tumor debulking surgery between January 2005 and March 2017 at Chiang Mai University Hospital were retrospectively reviewed. We analyzed stage, histology, clinical presentation, type of surgery, role of lymphadenectomy, 5-year disease-free survival and 5-year overall survival. All pathologic slides were reviewed by gynecologic pathologists.

Results: Fifty-four patients with malignant SCSTs of the ovary were identified in this study. Thirty-eight (70.4%) patients had adult granulosa cell tumors, 6 (11.0%) had juvenile granulosa cell tumors, 5 (9.3%) had Sertoli-Leydig cell tumors, and 3 (5.6%) had unclassified sex cord-stromal tumors. Twenty-five (46.3%) patients underwent complete surgical staging procedure and 15 (27.7 %) underwent fertility sparing surgery. Retroperitoneal lymph node dissection was performed in 30 (55.6%) patients. No lymph node metastasis was detected in this study. 47 (87%) patients had stage I, 1 (1.9%) stage II, 5 (9.2%) stage III and 1 (1.9%) had stage IV diseases. Of 4 patients developing recurrence, 1 (1.9%) in pelvis and 3 (5.5%) had distant metastases. At the median follow up time of 35 months, the 5-year disease-free survival and the 5-year overall survival was 88.7% and 92.4%, respectively.

Conclusion: The survival outcomes of women with ovarian sex cord-stromal malignancies are favorable. No lymph node metastasis is detected in this study. Retroperitoneal lymphadenectomy may be omitted for surgical staging procedure for patients with malignant ovarian SCSTs.

PERIPHERAL NEUROTOXICITY IN GYNECOLOGIC ONCOLOGY PATIENTS WHO RECEIVED PACLITAXEL

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Background & Aim: Peripheral neurotoxicity is the frequent adverse effect of paclitaxel. This drug is commonly used in gynecologic oncology patients. However, the incidence rate of this toxicity was limited especially in Thai patients. We conducted this prospective study to identify the incidence rate of peripheral neurotoxicity in chemo-naive gynecologic cancer patients who received paclitaxel.

Methods: Between June 2014- October 2015, 40 patients who planned to received paclitaxel 175 mg/2 plus carboplatin AUC = 5 were interviewed about the neurotoxicity by using The Common Terminology Criteria for Adverse Events v 3.0. score before received the subsequent cycle of chemotherapy. The basic data and the grade of TNS were recorded.

Results: The mean age was 55.6 years and 77.5% were diagnosed as ovarian and endometrial cancer. The patients were interviewed before received cycle 2 in 40 cases, cycle 2-6 in 30 cases and at 1,2 and 3 months after cycle 6 in 30,25 and 6 cases, respectively. From 251 cycles of chemotherapy, the incidence rate of sensory impairment was 60.6%. Of these, was grade 1 at 55.4% and grade 2 that developed after 2 cycles at 5.2% while the incidence rate of motor impairment was only 7.9% and all were grade 1. However, 15.9% felt worse about neurotoxicity from the previous cycle of chemotherapy.

Conclusion: Two-thirds of the patients who received paclitaxel reported sensory neurotoxicity which became worse after 2 cycles whereas a minority of the patients reported motor impairment.