Original Article

Surgical Management for Ovarian Cancer: Survey of Practice among Thai Gynecologic Oncologists

Chanpanitkitchot S, MD[1], Tiyayon J, MD[1], Kietpeerakool C, MD[1], Tangjitgamol S, MD[2], Srisomboon J, MD[3], Thai Gynecologic Cancer Society (TGCS)[4]

[1] Department of Obstetrics and Gynecology, Rajavithi Hospital, College of Medicine, Rangsit University, Bangkok, Thailand
[2] Department of Obstetrics and Gynecology, Faculty of Medicine Vajira Hospital, Navamindradhiraj University, Bangkok, Thailand
[3] Department of Obstetrics and Gynecology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
[4] Thai Gynecologic Cancer Society (TGCS), Huaykwang, Bangkok, Thailand

Objective: To describe the practice landscape among Thai gynecologic oncologists toward the surgical management of ovarian cancer obtained from the Thai Gynecologic Cancer Society (TGCS) Survey.

Material and Methods: The present study was a part of the national practice survey on the management of gynecologic cancer in Thailand. All Thai gynecologic oncologists were targeted for the TGCS survey. The present study analyzed data regarding the surgical treatment of ovarian cancer.

Results: Of 170 respondents, one-third of the respondents reported routinely assessing tumor volume and location by pre-operative imaging. Respondents in private and secondary hospitals were more likely to perform pre-operative imaging than those in governmental and tertiary hospitals (72.2% versus 34.2% and 71.4% versus 31.7%). Most of the respondents (94.7%) reported routinely performing lymphadenectomy in presumed early-stage cancer. In the advanced-stage, most of the respondents (71.3%) reported selectively performing lymphadenectomy only in women with clinically suspicious metastasis or when optimal cytoreduction could be attained. Respondents with practice duration less than 5 years were less likely to routinely perform lymphadenectomy in women with advanced-stage disease compared to those with longer practice duration (14.1% versus 39.6%). The respondents with long duration of practice were more likely to perform secondary cytoreduction than those who had fewer experiences (77.8% versus 56.3%).

Conclusion: This survey indicated variations of some practices on the surgical treatment of ovarian cancer in Thailand including pre-surgical imaging assessment, a pattern of lymph node dissection, and secondary cytoreduction for recurrent disease.

Keywords: Survey, Practice, Gynecologic cancer, Ovarian cancer, Surgery

J Med Assoc Thai 2020;103(Suppl. 7): 84-9
Website: http://www.jmatonline.com

Ovarian cancer is the third most common gynecological cancer worldwide, with an age-standardized incidence rate of 6.6 per 10,000[1]. More than 90% of all ovarian cancers are of epithelial origin, designated epithelial ovarian cancer[2]. Ovarian cancer is the most lethal gynecologic cancer[1,2]. This is mainly because most women with ovarian cancer are asymptomatic (early-stage disease) or have non-specific symptoms (advanced stage disease), leading to a delayed diagnosis with advanced diseases at presentation[2]. Surgical treatment is a fundamental approach in managing women with ovarian cancer[2,3]. The operation aims to remove not only the ovaries but also the uterus, fallopian tubes, retroperitoneal lymph nodes, omentum, and as much of the visible tumor possible (also called debulking or cytoreduction). The surgico-pathological findings are taken altogether to assign the stage of ovarian cancer according to the International Federation of Gynecology and Obstetrics (FIGO)[3].

Long-term data analysis indicates that completeness of surgical staging in patients with early EOC is associated with better oncological outcomes[4]. Also, complete resection of all visible tumors improves survival outcomes in women with advanced-stage EOC[5,6]. Based on these shreds of evidence, surgical treatment is central to the management of ovarian cancer.

However, little is known about the management patterns of ovarian cancer in Thailand, especially about the details of surgical treatment practice. Accordingly, this survey was conducted to determine the patterns of surgical management of ovarian cancer among Thai gynecologic oncologists. The survey data would help determine the current practice and identify the areas needing further improvement in our setting.

Correspondence to:

Tiyayon J.

Department of Obstetrics and Gynecology, Rajavithi Hospital, College of Medicine, Rangsit University, Bangkok 10400, Thailand.

Phone: +66-80-9071428, **Fax:**+66-2-3548146

E-mail: tjitima@gmail.com

Materials and Methods

This cross-sectional study was undertaken on the

How to cite this article: Chanpanitkitchote S, Tiyayon J, Kietpeerakool C, Tangjitgamol S, Srisomboon J, Thai Gynecologic Cancer Society (TGCS). Surgical Management for Ovarian Cancer: Survey of Practice among Thai Gynecologic Oncologists. J Med Assoc Thai 2020;103(Suppl.7): 84-9.

e-survey regarding the patterns of management of gynecologic cancer. The full description of survey methods, as well as questions for each cancer management, were presented elsewhere in detail[7]. Briefly, all 305 Thai gynecologic oncologists identified on the TGCS membership registration database were targeted for the survey. In August 2019, the authors emailed an introductory letter and link of the e-survey questionnaire to 258 gynecologic oncologists. The questionnaire covered various aspects of the management of gynecologic cancer. The survey ended on October 31, 2019. A total of 170 gynecologic oncologists responded to the questions and were included in the study.

The present study abstracted the survey data regarding the practice of surgical treatment of ovarian cancer which included pre-operative investigation, intra-operative management, and perioperative outcomes. The present study was approved by the Ethical Review Committee of Rajavithi Hospital and the relevant ethical clearance mechanisms in all affiliations (Rajavithi Hospital, 104/2562; COAs/IRBs; Faculty of Medicine Vajira Hospital, 097/2562; Faculty of Medicine, Chiang Mai University, OBG-2562-06506).

To determine the influence of the different types of the institutions to the patterns of practice, the types of respondents' institution were classified based on some selected characteristics i.e. training affiliation on the gynecologic fellowship training (training hospital versus non-training hospital); administration and ownership (governmental hospital versus private hospital); the type of care (secondary hospital versus tertiary hospital).

The duration of gynecologic oncology practice with a cut-off value at 5 years was applied as a factor indicating the experience of respondents. The adequacy of the number of other consulting specialists in the treating team (i.e. urologists, anesthesiologists, colorectal surgeon, etc.) was arbitrarily reported based on self-assessment of the respondents.

Only two investigators (SC and ST) had been authorized to access the database of e-survey. The questionnaires were anonymous. The E-mails of the respondents were stored separately from the data of the questionnaire and were eliminated after completed the research.

Statistical analyses were performed using SPSS computer software version 22 (IBM Corporation, Armonk, NY, USA). Descriptive statistics were used to report patterns of practice in each aspect. Differences between the comparison groups were determined by using the χ^2 and Fisher's exact test, whenever appropriate. All statistical tests were two-sided and a *p*-value of less than 0.05 was considered statistically significant.

Results

Of 170 respondents, the mean age was 41.1 years (SD 8.25 years). Nearly two-thirds (63.5%) of the respondents were female. The duration of practice varied from two years to twelve years with a median duration of 5 years. Most respondents worked in the governmental hospital (89.4%) and tertiary-level hospitals (83.5%). Approximately half (50.6%) of respondents worked in the institutions involved in gynecologic fellowship training. The number of gynecologic oncologists in the respondents' institutions ranged from 1 to 19 with a median of 6.

Table 1 displays the patterns of pre-operative and intra-operative managements stratified by the types of institutional settings and the practice experience of the respondents. Overall, only one-third of the respondents reported routinely investigating and using pre-surgical imaging (i.e. computed tomography (CT), magnetic resonance imaging (MRI), or positron emission tomography (PET)). The remaining selectively performed the imaging study only in women with clinical suspicion of advanced-stage or those who had undergone incomplete surgical treatment. Respondents in the private hospitals and secondary hospitals were more likely to perform routine pre-operative imaging assessment than those who worked in the governmental and tertiary Hospitals (72.2% versus 34.2% and 71.4% versus 31.7%, respectively).

Regarding the patterns of lymphadenectomy, most of the respondents (94.7%) reported routinely performing lymphadenectomy in clinically early-stage cancer. In women with clinically advanced stage, most of the respondents (71.3%) reported to perform lymphadenectomy selectively and only in women with clinically suspicious lymph node metastasis or when optimal cytoreduction could be attained. Respondents with practice experience of less than 5 years were less likely to routinely perform lymphadenectomy in women with clinically advanced stage compared to those with longer practice duration (14.1% versus 39.6%). Most respondents (68.6%) reported performing systematic dissection if lymphadenectomy was carried out and approximately 41% of the respondents reported to include either pelvic or para-aortic lymph nodes in the dissection. Respondents working in the teaching hospital were more likely to include either pelvic or para-aortic lymph nodes in their lymphadenectomy procedure than those who worked in non-teaching hospitals (55.0% versus 27.7%).

The results regarding self-reported perioperative outcomes are shown in Table 2. The median numbers of pelvic and para-aortic lymph nodes yielded per case were 12 (range from 3 to 30) and 3 (range from 0 to 10), respectively. Respondents working in a teaching hospital were more likely to report a greater number of either pelvic or para-aortic lymph nodes obtained than those who worked in non-teaching hospitals.

Rate of optimal surgery, defined as the largest diameter of residual disease measuring $\leq$1.0 cm, varied from 0% to 100% with a median of 70%. The rate of optimal operation was similar across the different types of institutional settings and practice experience (Table 2).

Rate of secondary cytoreduction performed among women with recurrent ovarian cancer varied from 0% to 80% with a median of 10%. Respondents who have long practice duration and reported having an adequate number of

Table 1. Patterns of preoperative and intraoperative managements among responders stratified by the types of hospital settings and experiences in gynecologic oncology practice

Patterns of practice	Survey results		*p*-value
Preoperative imaging carried out in all cases (n = 170)	65 (38.2)		
Teaching vs. Non-teaching Hospitals	39/84 (46.4)	26/86 (30.2)	0.030
Governmental vs. Private Hospitals	52/152 (34.2)	13/18 (72.2)	<0.001
Secondary vs. Tertiary Hospitals	20/28 (71.4)	45/142 (31.7)	<0.001
Lymphadenectomy performed in all cases with presumed early-stage cancer (n = 168)	161 (94.7)		
Teaching vs. Non-teaching Hospitals	81/85 (95.3)	80/83 (96.4)	0.723
Governmental vs. Private Hospitals	144/150 (96.0)	17/18 (94.4	0.755
Secondary vs. Tertiary Hospitals	27/28 (96.4)	134/140 (95.7)	0.863
Less than 5 years vs. ≥5 years of experience	66/71 (93.0)	95/97 (97.9)	0.111
Lymphadenectomy performed in all cases with clinically advanced-stage cancer (n = 167)	48 (28.7)		
Teaching vs. Non-teaching Hospitals	22/85 (25.9)	26/82 (31.7)	0.406
Governmental vs. Private Hospitals	41/149 (27.5)	7/18 (38.9)	0.314
Secondary vs. Tertiary Hospitals	10/28 (35.7)	38/139 (27.3)	0.372
Less than 5 years vs. ≥5 years of experience	10/71 (14.1)	38/96 (39.6)	<0.001
Systemic dissection of lymph node in all cases if performed (n = 169)	116 (68.6)		
Teaching vs. Non-teaching Hospitals	59/85 (69.4)	57/84 (67.9)	0.828
Governmental vs. Private Hospitals	101/151 (66.9)	15/18 (83.3)	0.155
Secondary vs. Tertiary Hospitals	23/28 (82.1)	93/141 (66.0)	0.092
Less than 5 years vs. ≥5 years of experience	54/71 (76.1)	62/98 (63.3)	0.077
Including both pelvic and para-aortic lymph nodes in all cases if dissected/sampled (n = 163)	67 (41.1)		
Teaching vs. Non-teaching Hospitals	44/80 (55.0)	23/83 (27.7)	<0.001
Governmental vs. Private Hospitals	64/145 (44.1)	3/18 (16.7)	0.025
Secondary vs. Tertiary Hospitals	12/28 (42.9)	55/135 (40.7)	0.836
Less than 5 years vs. ≥5 years of experience	27/68 (39.7)	40/95 (42.1)	0.759

Data are presented as number (percentage)

Table 2. Self-reported perioperative outcomes among the responder stratified by the types of hospital settings and years of experiences in gynecologic oncology practice

Perioperative outcomes	Survey results		*p*-value
Number of pelvic lymph node ≥12 (n = 167)	85 (50.9)		
Teaching vs. Non-teaching Hospitals	55/84 (65.5)	30/83 (36.1)	<0.001
Governmental vs. Private Hospitals	79/149 (53.0)	6/18 (33.3)	0.115
Secondary vs. Tertiary Hospitals	12/27 (44.4)	73/140 (52.1)	0.464
Less than 5 years vs. ≥5 years of experience	34/70 (48.6)	51/97 (52.6)	0.609
Number of para-aortic lymph node ≥3 (n = 162)	101 (62.3)		
Teaching vs. Non-teaching Hospitals	66/84 (78.6)	35/78 (44.9)	<0.001
Governmental vs. Private Hospitals	94/145 (64.8)	7/17 (41.2)	0.057
Secondary vs. Tertiary Hospitals	14/25 (56.0)	87/137 (63.5)	0.476
Less than 5 years vs. ≥5 years of experience	38/69 (55.1)	63/93 (67.7)	0.100
Rate of optimal cytoreduction ≥70% (n = 170)	98 (57.6)		
Teaching vs. Non-teaching Hospitals	45/86 (52.3)	53/84 (63.1)	0.155
Governmental vs. Private Hospitals	65/152 (42.8)	7/18 (38.9)	0.753
Secondary vs. Tertiary Hospitals	13/28 (46.4)	59/142 (41.5)	0.633
Less than 5 years vs. ≥5 years of experience	46/71 (64.8)	52/99 (52.5)	0.111

Data are presented as number (percentage)

oncological surgeons and urologists were more likely to perform secondary cytoreduction than those who did not (Table 3).

Discussion

As a part of the national practice survey on the management of gynecologic cancer in Thailand, this study

indicated the variations of practice patterns of surgical treatment for ovarian cancer. Various surgical practices including routine pre-surgical imaging assessment, patterns of lymph node dissection and the number of excised lymph nodes obtained, and the rate of secondary cytoreduction have been significantly impacted by the characteristics of institutional setting, the experience of the respondents, and availability of other consulting specialists in the treating team.

Although surgery represents the cornerstone in the management of ovarian cancer, some patients may have extensive tumor burden to or close to various vital organs wherein optimal cytoreduction is impossible or the perioperative morbidities may outweigh the benefits. Pre-surgical imaging has been proposed as one of the standards of care for women with ovarian cancer to identify unresectable or difficult to resect disease[8,9]. Pre-operative imaging in epithelial ovarian cancer patients helps select the patients who may mostly benefit either from primary cytoreduction surgery or from neoadjuvant chemotherapy[8,9]. Computerized tomography (CT) scan of the chest and abdominopelvic area are the standard imaging for pre-surgical assessment of ovarian cancer patients. MRI may help overcome the limitations of CT scan, particularly for small peritoneal deposits in difficult-to-resect sites[8]. The use of PET-CT or PET-MRI imaging in the pre-operative setting is currently under assessment[8,9]. However, only 38.2% of the respondents in this survey reported using imaging for pre-surgical evaluation. Also, the rate of pre-surgical imaging assessment was particularly low among the respondents from the non-teaching hospital, governmental hospital, and tertiary hospital. However, the pragmatic nature of a cross-sectional survey study per se makes this analysis unable to determine the reasons leading to the low rate of pre-surgical imaging assessment and its impact on the treatment outcome.

Retroperitoneal lymphadenectomy, as an integral part of complete surgical staging in presumed early-stage ovarian cancer, is critical for determining the extent of the disease and could have cancer upstage from presumed early stage to advanced stage by 5% to 24%[10-12]. Nevertheless, the benefits of retroperitoneal lymphadenectomy performed among women with advanced-stage ovarian cancer in terms of prolonging survival are apparent only when optimal debulking could be achieved[13,14]. Retroperitoneal lymphadenectomy, if performed, should include either pelvic or para-aortic lymph nodes[12]. Based on this evidence, more than 90% of the respondents in this survey reported performing lymphadenectomy in all women with presumed early-stage ovarian cancer. On the other hand, only approximately 29% of the respondents reported routinely performing lymphadenectomy for advanced-stage ovarian cancer. As the modification of the extent of retroperitoneal lymphadenectomy based on the degree of the intraperitoneal residual tumor has been recently advocated, respondents who just graduated from the training may be more familiar with this emerging concept. A lower rate of routine lymphadenectomy performed in women with advanced ovarian cancer among the respondents with practice duration of fewer than 5 years compared to those with longer practice is therefore anticipated.

The number of excised lymph nodes may represent an easy-to-obtain indicator for determining the quality of surgery[15]. One of the quality assurance indicators for radical hysterectomy among women with cervical cancer proposed by the European Organization for Research and Treatment of Cancer-Gynecological Cancer Group (EORTC-GCG) is the number of excised lymph nodes[15]. The percentage of pelvic lymphadenectomy specimens obtained during radical hysterectomy and bilateral pelvic lymphadenectomy that contain >11 examined lymph nodes should be at 90% or

Table 3. Secondary cytoreduction performed for recurrent ovarian cancer stratified by the characteristics of settings

Reported outcome	Survey results		*p*-value
Secondary cytoreduction performed ≥10% of patients with recurrence (n = 170)	117 (68.8)		
Types of Hospital settings			
Teaching vs. Non-teaching Hospitals	63/86 (73.3)	54/84 (64.3)	0.207
Governmental vs. Private Hospitals	104/152 (68.4)	13/18 (72.2)	0.742
Secondary vs. Tertiary Hospitals	20/28 (71.4)	97/142 (68.3)	0.745
Experiences in gynecologic oncology practice (n = 170)			
Less than 5 years vs. ≥5 years of experience	40/71 (56.3)	77/99 (77.8)	0.003
Adequacy of the treating team (n = 170)			
Adequate vs. inadequate number of General surgeons	99/140 (70.7)	18/30 (60.0)	0.250
Adequate vs. inadequate number of Oncologic surgeons	60/77 (77.9)	57/93 (61.3)	0.020
Adequate vs. inadequate number of Colorectal surgeons	68/94 (72.3)	49/76 (64.5)	0.271
Adequate vs. inadequate number of Urologists	94/128 (73.4)	23/42 (54.8)	0.023
Adequate vs. inadequate number of Anesthesiologists	95/137 (69.3)	22/33 (66.7)	0.766
Adequate vs. inadequate number of Blood Bank personals	100/144 (69.4)	17/26 (65.4)	0.681

Data are presented as number (percentage)

greater[15]. Nevertheless, there is no statement regarding the number of excised lymph nodes required in the EORTC-GCG process quality assurance for ovarian cancer surgery[16]. In this survey, the cut-off value of the number of excised lymph nodes was set at 12 and 3 for pelvic and para-aortic lymph nodes, respectively (corresponding to the median number of excised lymph nodes reported in each area). The authors noted that respondents from the private Hospital and non-teaching Hospital reported fewer numbers of excised lymph nodes than those in the comparative settings (Table 2). This finding thus underlines the settings that may need improvement in the quality of lymphadenectomy.

In the EORTC-GCG quality assurance for ovarian cancer surgery, complete abdominal surgical resection, defined by the removal of all macroscopic disease, should exceed 65% with a minimum target of 50%[16]. In this survey, the authors applied the optimal cytoreduction, defined as the largest diameter of residual tumor measuring ≤1.0 cm, as one of the quality assessment indicators for ovarian cancer surgery. The authors set the cut-off value of the rate of optimal cytoreduction at 70%, corresponding to the median number of the rate of optimal cytoreduction achieved among the responders of this survey. The authors noted that the rate of optimal cytoreduction seemed to be comparable across the different institutional settings and duration of practice (Table 2).

Most women with advanced epithelial ovarian cancer experienced recurrent disease, despite maximal surgical cytoreduction at the time of initial diagnosis and adjuvant chemotherapy[2]. Although the role of tumor removal surgery in the setting of recurrent disease (or secondary cytoreduction) remains controversial[17-20], this operation may provide promising oncological outcomes in well-selected cases[20]. Secondary cytoreduction inherently carries a high risk of perioperative complications. It is thus anticipated that gynecologic oncologists who have a long duration of practice and have other consulting specialists available in their treating team are more likely to perform secondary cytoreduction than those who did not. This assumption has been confirmed by our survey results (Table 3).

The study has some limitations. Although question naire based survey is very useful to assess variations on treatment practices, the results of the survey are, however, solely based on self-reported data from respondents and it thus might not reflect their actual practices. Other limitations included the exclusion of patients' and other healthcare professionals' perspectives. The high response rate to the survey is a strength of this survey. The results of this survey, therefore, can depict the practice landscape among Thai gynecologic oncologists.

Conclusion

This is the first nationwide survey that represents the current practices of surgery for ovarian cancer in Thailand. The findings of this survey indicated variations in the patterns of some practices including pre-surgical imaging assessment, pattern and quality of lymph node dissection, and secondary cytoreduction for recurrent disease. Any practices which were below standard recommendation needed attention from the responsible sectors. The curriculum of fellowship training and post-graduation training courses may be revised or offered accordingly to optimize medical care service and ultimate patients' outcomes.

What is already know on this topic?

Surgery is the mainstay of ovarian cancer treatment. Pre-operative imaging is helpful for planning treatment and for the issue to achieve optimal results. Lymphadenectomy, as an integral part of complete surgical staging in presumed early-stage ovarian cancer, is critical for determining the extent of the disease. Benefits of lymphadenectomy performed among women with advanced-stage ovarian cancer are apparent only when optimal debulking could be achieved. Secondary cytoreduction for recurrent ovarian cancer may provide promising outcomes in well-selected cases.

What this study adds?

Little is known about the management patterns of surgical treatment for ovarian cancer in Thailand. This survey indicated variations of some practices including pre-surgical imaging assessment, a pattern of lymph node dissection, and secondary cytoreduction for recurrent disease. These variations were associated with the types of institution and experience of the respondents.

Acknowledgements

This study was granted by the Rajavithi Research Fund.

Potential conflicts of interest

The authors declare no conflicts of interest.

References

1. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin 2018;68:394-424.
2. Doubeni CA, Doubeni AR, Myers AE. Diagnosis and management of ovarian cancer. Am Fam Physician 2016;93:937-44.
3. Prat J. FIGO's staging classification for cancer of the ovary, fallopian tube, and peritoneum: abridged republication. J Gynecol Oncol 2015;26:87-9.
4. Trimbos B, Timmers P, Pecorelli S, Coens C, Ven K, van der Burg M, et al. Surgical staging and treatment of early ovarian cancer: long-term analysis from a randomized trial. J Natl Cancer Inst 2010;102:982-7.
5. Vergote I, Trope CG, Amant F, Kristensen GB, Ehlen T, Johnson N, et al. Neoadjuvant chemotherapy or primary surgery in stage IIIC or IV ovarian cancer. N Engl J Med 2010;363:943-53.
6. Chi DS, Musa F, Dao F, Zivanovic O, Sonoda Y, Leitao MM, et al. An analysis of patients with bulky advanced

stage ovarian, tubal, and peritoneal carcinoma treated with primary debulking surgery (PDS) during an identical time period as the randomized EORTC-NCIC trial of PDS vs neoadjuvant chemotherapy (NACT). Gynecol Oncol 2012;124:10-4.
7. Tangjitgamol S, Chanpanitkitchote S, Charoenkwan K, Srisomboon J, Kasemsarn P, Temrungruanglert W, et al. Thai Gynecologic Cancer Society (TGCS). Working situation and problems in practice of Thai gynecologic oncologists: The Thai Gynecologic Cancer Society survey study. J Med Assco Thai 2020. [In press]
8. Rizzo S, Del Grande M, Manganaro L, Papadia A, Del Grande F. Imaging before cytoreductive surgery in advanced ovarian cancer patients. Int J Gynecol Cancer 2020;30:133-8.
9. Castellani F, Nganga EC, Dumas L, Banerjee S, Rockall AG. Imaging in the pre-operative staging of ovarian cancer. Abdom Radiol (NY) 2019;44:685-96.
10. Timmers PJ, Zwinderman K, Coens C, Vergote I, Trimbos JB. Lymph node sampling and taking of blind biopsies are important elements of the surgical staging of early ovarian cancer. Int J Gynecol Cancer 2010;20:1142-7.
11. Trimbos JB. Lymphadenectomy in ovarian cancer: standard of care or unnecessary risk. Curr Opin Oncol 2011;23:507-11.
12. Jeon S, Lee SJ, Lim MC, Song T, Bae J, Kim K, et al. Surgical manual of the Korean Gynecologic Oncology Group: ovarian, tubal, and peritoneal cancers. J Gynecol Oncol 2017;28:e6.
13. Mikami M. Role of lymphadenectomy for ovarian cancer. J Gynecol Oncol 2014;25:279-81.
14. Gao J, Yang X, Zhang Y. Systematic lymphadenectomy in the treatment of epithelial ovarian cancer: a meta-analysis of multiple epidemiology studies. Jpn J Clin Oncol 2015;45:49-60.
15. Verleye L, Vergote I, Reed N, Ottevanger PB. Quality assurance for radical hysterectomy for cervical cancer: the view of the European Organization for Research and Treatment of Cancer Gynecological Cancer Group (EORTC-GCG). Ann Oncol 2009;20:1631-8.
16. Verleye L, Ottevanger PB, van der Graaf W, Reed NS, Vergote I. EORTC-GCG process quality indicators for ovarian cancer surgery. Eur J Cancer 2009;45:517-26.
17. Onda T, Yoshikawa H, Yasugi T, Yamada M, Matsumoto K, Taketani Y. Secondary cytoreductive surgery for recurrent epithelial ovarian carcinoma: proposal for patients selection. Br J Cancer 2005;92:1026-32.
18. Nasu K, Kai K, Hirakawa T, Nishida M, Matsumoto H, Kawano Y, et al. Retrospective analysis of outcomes of secondary debulking surgery for recurrent epithelial ovarian cancer with favorable prognostic factors. J Obstet Gynaecol Res 2014;40:791-6.
19. Coleman RL, Spirtos NM, Enserro D, Herzog TJ, Sabbatini P, Armstrong DK, et al. Secondary surgical cytoreduction for recurrent ovarian cancer. N Engl J Med 2019;381:1929-39.
20. Gockley A, Melamed A, Cronin A, Bookman MA, Burger RA, Cristae MC, et al. Outcomes of secondary cytoreductive surgery for patients with platinum-sensitive recurrent ovarian cancer. Am J Obstet Gynecol 2019;221:625.

การผ่าตัดรักษามะเร็งรังไข่: การสำรวจแนวปฏิบัติของแพทย์มะเร็งนรีเวชไทย

ศรัญญา ชาญพานิชกิจโชติ, จิติมา ติยายน, ชำนาญ เกียรติพีรกุล, ศิริวรรณ ตั้งจิตกมล, จตุพล ศรีสมบูรณ์, สมาคมมะเร็งวิทยานรีเวชไทย

วัตถุประสงค์: เพื่อบรรยายแนวปฏิบัติของแพทย์มะเร็งนรีเวชไทยในการผ่าตัดรักษามะเร็งรังไข่จากการสำรวจของสมาคมมะเร็งวิทยานรีเวชไทย

วัสดุและวิธีการ: การศึกษานี้เป็นส่วนหนึ่งของการสำรวจระดับชาติที่เกี่ยวข้องกับแนวทางเวชปฏิบัติสำหรับมะเร็งนรีเวช กลุ่มเป้าหมายได้แก่ แพทย์มะเร็งนรีเวชไทยทั้งหมด โดยการศึกษานี้วิเคราะห์ข้อมูลที่เกี่ยวข้องกับการผ่าตัดมะเร็งรังไข่

ผลการศึกษา: ในผู้ตอบแบบสอบถามจำนวน 170 คน หนึ่งในสามทำการประเมินขนาดและตำแหน่งของมะเร็งด้วยการส่งตรวจภาพรังสีวินิจฉัยก่อนผ่าตัด ผู้ตอบแบบสอบถามที่ทำเวชปฏิบัติในสถานพยาบาลภาคเอกชน (ร้อยละ 72.2) และสถานพยาบาลระดับทุติยภูมิ (ร้อยละ 71.4) มีแนวโน้มในการส่งตรวจภาพรังสีวินิจฉัยก่อนผ่าตัดมากกว่าผู้ตอบแบบสอบถามในสถานพยาบาลภาครัฐ (ร้อยละ 34.2) และสถานพยาบาลระดับตติยภูมิ (ร้อยละ 31.7) ร้อยละ 94.7 ของผู้ตอบแบบสอบถามจะเลาะต่อมน้ำเหลืองในผู้ป่วยที่สงสัยภาวะมะเร็งรังไข่ระยะต้นทุกราย ในขณะที่กลุ่มผู้ป่วยที่สงสัยภาวะมะเร็งรังไข่ระยะลุกลาม ผู้ตอบแบบสอบถามร้อยละ 71.3 จะเลาะต่อมน้ำเหลืองเฉพาะรายที่สงสัยการกระจายของโรคไปที่ต่อมน้ำเหลืองหรือในรายที่สามารถผ่าตัดเอามะเร็งออกได้อย่างน่าพอใจ ผู้ตอบแบบสอบถามที่มีประสบการณ์การทำงานน้อยกว่า 5 ปี มีแนวโน้มที่จะทำการเลาะต่อมน้ำเหลืองในกลุ่มผู้ป่วยมะเร็งรังไข่ระยะลุกลามทุกรายน้อยกว่าผู้ที่มีประสบการณ์มากกว่า (ร้อยละ 14.1 และร้อยละ 39.6 ตามลำดับ) ผู้ตอบแบบสอบถามที่มีประสบการณ์นานมีแนวโน้มที่ทำการผ่าตัดผู้ป่วยในกลุ่มผู้ป่วยมะเร็งรังไข่ที่มีการกลับเป็นซ้ำสูงกว่าผู้ที่มีประสบการณ์น้อยกว่า (ร้อยละ 77.8 และร้อยละ 56.3 ตามลำดับ)

สรุป: การสำรวจครั้งนี้แสดงถึงความแตกต่างของบางแนวปฏิบัติในการผ่าตัดมะเร็งรังไข่ในประเทศไทยได้แก่ การประเมินด้วยภาพรังสีวินิจฉัยก่อนผ่าตัด รูปแบบการเลาะต่อมน้ำเหลือง และการผ่าตัดในมะเร็งรังไข่ที่มีการกลับเป็นซ้ำ