surgery (CRS) improved survival in selected patients with peritoneal carcinomatosis, although the procedures are associated with high morbidity and mortality rates. This study investigated the morbidity and mortality rate of CRS with HIPEC in patients with gynecologic cancers.

Methods: We reviewed retrospectively the medical records of patients who underwent CRS with HIPEC due to gynecologic cancer and pseudomyxoma peritonei from January 2013 to June 2021 at 2 institutions in Korea. The adverse events (AEs) that occurred within 60 days of HIPEC and operative factors related to the AEs were investigated.

Results: A total of 170 procedures were included in this study. There were 155 procedures with ovarian/tubal/peritoneal cancer (91.2%) and 15 (8.8%) with pseudomyxoma peritonei. The median age of patients was 55 years old (range, 16–79). The median score of the peritoneal carcinomatosis index was 9 (range, 0–29). The median operative time was 480 minutes (range, 195–1,080), and estimated blood loss was 600 mL (range, 50–8,600). AE of grade ≥ 3 during hospitalization occurred in 63 procedures (37.1%). The most common serious AE was anemia (34/170, 20%), followed by neutropenia (4.7%) and ileus (4.1%). The mortality rate was 0.6% (1/170) due to acute myocardial infarction. A total of 29 patients (17.1%) was re-hospitalization due to AEs within 60 days postoperative.

Conclusion: The morbidity and mortality rates of CRS with HIPEC in gynecologic cancer patients are comparable with previous reports, and those are in acceptable rates even broad extent of surgery and the long operation time.

Miscellaneous

Poster (M01)

Quality of Life, Nursing & Supportive Care

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Factors influencing the use of complementary and alternative medicine in gynecologic oncology patients

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Objective: To determine the factors influencing the use of complementary and alternative medicine (CAM) in gynecologic cancer patients and the prevalence and pattern of CAM use.

Methods: This was a cross-sectional study of 370 gynecologic cancer patients conducted at the out-patient clinic, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

After informed consent, participants were asked to complete a standardized questionnaire including socio-demographic and clinical characteristic, detail of CAM use, attitude of CAM use, and quality of life using EORTC QLQ-C30.

Results: The prevalence of CAM use was 25.13%. The most common type was herbal medicine (55.90%). The participants who resided or had a birthplace in rural areas presented with a higher proportion of CAM use than those in urban areas ($p=0.470$ and $p=0.004$, respectively). Participants who received multiple modalities of cancer treatment reported significantly higher proportion of CAM use ($p=0.024$). Most CAM users agreed that the CAM could be used in combination with standard treatment, and some rather disagreed that CAM could interrupt the treatment effect of the conventional treatment. CAM users had significantly higher role functioning in quality-of-life scores.

Conclusion: Factors influencing CAM use in gynecologic cancer patients were rural area birthplace or residency, receiving multiple modalities of cancer treatment, having positive attitude towards CAM use. CAM users had better performance in role functioning in quality-of-life score. Therefore, gynecologic oncologists should pay attention to these factors in order to communicate with gynecologic cancer patients about CAM use.

Poster (M02)

Surgical Techniques & Perioperative Management

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Initial experience with the enhanced recovery after surgery (ERAS) protocols in gynecologic surgery at an urban academic tertiary medical center

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Objective: The aim of this study was to describe the development and early experience of enhanced recovery after surgery (ERAS) protocols in gynecology at an urban academic medical center.

Methods: The target patient population included those who underwent major gynecologic surgeries for both benign and malignant diseases between October 2020 and January 2021. Two attending surgeons implemented the protocols for their patients (ERAS cohort) while 3 attending surgeons maintained conventional perioperative care for their patients (non-ERAS cohort). Baseline characteristics, surgical outcomes and patients' answers to a 12-question survey were compared. A case-matched comparative analysis was also performed between

the ERAS cohort and the legacy non-ERAS cohort (those who received the same types of surgery from the 2 ERAS attending surgeons prior to implementation of the protocols).

Results: A total of 244 patients were evaluated (122 patients in ERAS cohort vs. 122 patients in non-ERAS cohort). The number of vials of opioid analgesia used during the first 2 post-operative days were significantly lower in the ERAS group. The patients in ERAS group reported less post-operative pain, feelings of hunger and thirst, and greater amount of exercise post-operatively. These benefits of the ERAS cohort were more pronounced in the patients who underwent laparotomic surgeries than those who underwent laparoscopic surgeries. The case-matched comparative analysis also showed similar results. The length of hospital stay did not differ between the 2 groups.

Conclusion: The results of this study demonstrated the safety, clinical feasibility and benefits of the ERAS protocols for patients undergoing gynecologic surgeries.

Poster (M03)
Miscellaneous

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Clinical analysis of multiple primary malignancies in gynecologic cancer patients

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Objective: The aim of this study was to evaluate the prevalence and oncologic outcomes in multiple primary malignant tumors (MPMTs) with gynecologic cancers.

Methods: A retrospective study included 1,929 patients diagnosed with gynecologic malignancies at a tertiary institution medical center between August 2005 and April 2021. We analyzed MPMTs in gynecologic malignancies.

Results: The prevalence of MPMTs with gynecologic cancer patients was 8.6% (165/1,929). The median diagnosis period between primary and secondary cancer was 38 months (range 0–420). Among 165 MPMTs patients, 20 patients had multiple primary gynecologic cancers (MPGC), and 145 patients had gynecologic cancer coexisting with non-gynecologic cancer (GNC). The coexistence of endometrial cancer and ovarian cancer (12/20, 60%) was the most common in MPGC patients. The most common non-gynecological cancer in GNC patients was breast cancer (50/145, 34.5%). Synchronous malignancies cases were 48 (29.1%), and metachronous malignancies cases were 117 (70.9%). MPGC patients had more synchronous cancer than GNC patients (50.0% vs. 26.2%, $p=0.030$). In patients with

ovarian cancer, the diagnosis of early stage was significantly higher in MPGC patients than that in GNC patients (87.5% vs. 52.4%, $p=0.031$). The mortality rate during study period was 7.3%, all of which were GNC patients. Gynecologic cancers were a more direct cause of death than non-gynecological cancer (66.7% vs. 33.3%).

Conclusion: Half of MPGC patients had synchronous cancer, which was significantly higher than GNC. Ovarian cancer showed a higher rate of being diagnosed at an early stage in MPGC patients than that in GNC patients. A systematic examination after the diagnosis of primary cancer can help to diagnose secondary primary malignancy at early stage and improve the prognosis of the patients.

Poster (M04)

Miscellaneous

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Natural killer cell as prognostic factor in Thai gynecologic cancer patients

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Objective: Natural killer (NK) cells are lymphocytes that are programmed in immune system to recognize altered/ or stressed by malignant transformation. In gynecologic cancers, the prognostic impacts of NK cell have also been published. Thus, this study aims to demonstrate a preliminary report of NK cell levels in correlation with treatment outcomes among Thai gynecologic cancer patients.

Methods: This cohort comparative study was conducted on 122 women with gynecologic cancer who have been treated with chemotherapy at Siriraj Hospital, between March 2011 and March 2012. The assessment of NK cell using flow cytometry (FACscan) with CD16/CD56 surface markers was done prior to the first course of chemotherapy, which reported in the percentage of NK cells and NK cell count. The majority chemotherapy was carboplatin and paclitaxel (PT) regimen every 3 week. The patients were divided into 2 groups based on the outcomes of the treatment: responder group (complete response or partial response), and non-responder group (stable disease, progression of disease, death with disease).

Results: After completion of 6 cycle-chemotherapy, the median follow-up time was 7.3 months (range 1–18 months). The mean percentage of NK cell in responder and non-responder group were $19.5\% \pm 9\%$ and $19.6\% \pm 8\%$, respectively ($p=0.949$). The median NK cell count in responder group was 313 cells/ μ L (range 95–1,255) compared to 282 cells/ μ L (range 66–1,885) in non-responder group ($p=0.276$). The mean of NK cell count in patients with death with disease, alive with disease, and alive without disease were 171 ± 95 ,