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• SESSION II  Special issues I: Fertility preservation in gynecologic cancers
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WELCOME MESSAGE

Welcome to Seoul, Korea for 3rd ASGO Workshop!

On behalf of the Asian Society of Gynecologic Oncology, we would like to cordially invite you to the 3rd ASGO Workshop to be held in Asan Medical Center, Seoul, Korea from August 23 to August 24, 2014.

Since The Asian Society of Gynecologic Oncology (ASGO) was founded in 2008, three ASGO Meetings and two Workshop have been successfully held in Korea and Japan. Especially, The 3rd ASGO Biennial Meeting 2013 in Kyoto was very much successful. It was good memory to discuss and share the further advancement of new development about treatment and care for gynecological cancer patients in Asian countries and to renew old friends and make new friends.

I firmly believe that the 3rd ASGO Workshop will be great opportunity for Asian young doctors to enhance their knowledge in this field and also for every participant to have a wider perspective on the Gynecologic Oncology.

In this workshop, we will have (1) New trends in the management of cervical cancer (2) Special issues I : Fertility preservation for gynecologic cancers (3) Surgery for gynecologic cancer (4) Recent advances in translational research (5) Special issues II : Updates in the management of gynecologic cancers (6) Medical writing & reviewing. In addition, I would like to invite all participants in the Welcome Dinner at the same venue on August 23, 2014 evening.

I hope Asian Society of Gynecologic Oncology will play a leading role to establish systematic studies and educational environment and to care Asian patients who are suffered from gynecologic tumor.

I wish this Workshop would be a valuable one to all participants and welcome you in Seoul upcoming August.

We dearly look forward to seeing you in August.

Best regards,

Joo-Hyun Nam M.D.
President
The Asian Society of Gynecologic Oncology

3rd ASGO WORKSHOP OVERVIEW

- **DATE**: August 23 (Sat) – August 24 (Sun), 2014
- **VENUE**: Conference Hall (B1 floor), Asan Medical Center
- **HOSTED BY**: Asian Society of Gynecologic Oncology (ASGO)
- **SUPPORTED BY**:
  - Korean Society of Gynecologic Oncology (KSGO)
  - Korean Gynecologic Oncology Group (KGOG)
  - Asan Medical Center
  - Seoul National University
- **LANGUAGE**: English
- **HOMEPAGE**: workshop.asiansgo.org
- **ASGO SECRETARIAT**
  - AIM KOREA
    - #103-1306 ParkTower, 24 Yongsan-dong 5ga, Yongsan-gu, Seoul 135-910, Korea
    - Phone: +82-2-3452-1855
    - Fax: +82-2-3451-8188
    - E-mail: asgo2015@aim-korea.com

VENUE

Asan Medical Center
ADDRESS 388-1 Pungnap-2 Dong, Songpa-Gu, Seoul 138-736, Korea
TEL +82-2-1688-7575
FAX +82-2-3451-8188
WEBSITE http://amc.seoul.kr

Asan Medical Center is the parent of seven hospitals which are part of the Asan Foundation established in 1977 and which has non-profit operations in areas including healthcare, social work, scholarship, and R&D support. With an area greater than 3 million sq. ft. and with 2,743 beds, Asan Medical Center is the largest hospital in Korea. Seoul AMC treats 9,600 outpatients and 285 emergency patients on an average day. It also performs 57,000 highly complex surgeries each year.

Asan Medical Center established Asan Institute for Life Sciences and Clinical Research Center which function as the ground for research and training, new treatments development, and clinical study for cancer treatment. “Asan Spirit” breathes in the way Asan Medical Center gives to the community and provides free-of-charge treatments for those in need.
**PROGRAM**

**DAY 1 : 23 August, 2014 (Saturday)**

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<th>TIME</th>
<th>TITLES</th>
<th>CHAIR/SPEAKER</th>
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<tbody>
<tr>
<td>08:00-08:45</td>
<td>Registration</td>
<td>Joo-Hyun Nam, President of ASGO</td>
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<tr>
<td>08:45-09:00</td>
<td>Opening remark</td>
<td>Toshiharu Kamura, Immediate past president of ASGO</td>
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<tr>
<td>09:00-09:25</td>
<td>Updates in cervical cancer prevention and control</td>
<td>Hextan YS Ngan (Hong Kong)</td>
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<tr>
<td>09:25-09:50</td>
<td>Tailored radiation therapy : IMRT / Proton therapy</td>
<td>Won Park (Korea)</td>
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<td>09:50-10:15</td>
<td>The evolution of treatment methods for cervical cancer in China</td>
<td>Zeyi Cao (Korea)</td>
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<td>10:15-10:45</td>
<td>Luncheon seminar (Supported by Janssen Korea)</td>
<td>Se-Jun Han (Korea)</td>
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<tr>
<td>12:00-12:20</td>
<td>Role of pegylated liposomal doxorubicin in recurrent ovarian cancer</td>
<td>Soo-Young Hur (Korea)</td>
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<td>12:20-13:30</td>
<td>Lunch</td>
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<tr>
<td>13:30-13:55</td>
<td>Sentinel lymph node mapping in endometrial cancer</td>
<td>Hyun Hoon Chung (Korea)</td>
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<tr>
<td>13:55-14:20</td>
<td>Cytoreductive surgery in ovarian cancer : pelvis</td>
<td>Suk-Joon Chang (Korea)</td>
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<tr>
<td>14:20-14:45</td>
<td>Cytoreductive surgery in ovarian cancer : upper abdomen</td>
<td>Sang Yoon Park (Korea)</td>
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<tr>
<td>14:45-15:10</td>
<td>Pelvic exenteration and LEER for recurrent cervical cancer</td>
<td>Sang-Young Ryu (Korea)</td>
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<tr>
<td>15:10-15:40</td>
<td>Break</td>
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<tr>
<td>15:40-16:05</td>
<td>An addition to biomarkers for epithelial ovarian cancer</td>
<td>Jae-Hoon Kim (Korea)</td>
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<td>16:05-16:30</td>
<td>The cancer genome atlas : TCGA data mining</td>
<td>Chi-Heum Cho (Korea)</td>
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<td>16:30-16:55</td>
<td>MicroRNA strategy in ovarian cancer</td>
<td>Keun Ho Lee (Korea)</td>
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<tr>
<td>16:55-17:20</td>
<td>Patient-derived tumor xenograft (AVATAR) model for gynecologic cancer</td>
<td>Jeong-Won Lee (Korea)</td>
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<tr>
<td>18:00</td>
<td>Welcome Dinner</td>
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**DAY 2 : 24 August, 2014 (Sunday)**

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<tr>
<td>09:00-09:25</td>
<td>HPV vaccination : the Malaysian experience</td>
<td>Suresh Kumarasamy (Malaysia)</td>
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<tr>
<td>09:25-09:50</td>
<td>Surgery for early stage cervical cancer : toward less-aggressive way</td>
<td>Jae-Weon Kim (Korea)</td>
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<tr>
<td>09:50-10:15</td>
<td>Ovarian cancer screening</td>
<td>Sankapan Wilalak (Thailand)</td>
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<tr>
<td>10:15-10:40</td>
<td>Controversial issues in the management of endometrial cancer</td>
<td>Uma Devi (India)</td>
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<tr>
<td>10:40-11:00</td>
<td>Break</td>
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<tr>
<td>11:00-11:25</td>
<td>Laparoscopic radical hysterectomy</td>
<td>Joo-Hyun Nam (Korea)</td>
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<tr>
<td>11:25-11:50</td>
<td>Abdominal radical trachelectomy : where are we now?</td>
<td>Ikuo Konishi (Japan)</td>
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<tr>
<td>11:50-12:15</td>
<td>Laparoscopic surgery in early stage ovarian cancer</td>
<td>Jae-Kwon Lee (Korea)</td>
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<tr>
<td>12:15-12:40</td>
<td>Robotic surgery in cervical cancer</td>
<td>Kung-Liahng Wang (Taiwan)</td>
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<td>12:40-14:00</td>
<td>Lunch</td>
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<td>14:00-14:20</td>
<td>Common mistakes by Asian medical writers</td>
<td>Masao Okazaki (USA)</td>
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<tr>
<td>14:20-14:40</td>
<td>Manuscript preparation before submitting to the JGO</td>
<td>Sukbom Kang (Korea)</td>
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<tr>
<td>14:40-15:00</td>
<td>What do the editors expect of the reviewers?</td>
<td>Chul-Min Lee (Korea)</td>
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<tr>
<td>15:00-15:20</td>
<td>Closing remark</td>
<td>Hee-Sug Ryu, Congress President of the 4th Biennial Meeting of ASGO</td>
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**Session V :**

Special issues II : Updates in the management of gynecologic cancers

Chair : Ikuo Konishi (Japan), Soon-Do Cha (Korea)

**Session VI :**

Surgery for gynecologic cancer (II)

Chair : Mohamad Farid Aziz (Indonesia), Kimio Ushijima (Japan)

**Session VII :**

Medical writing & reviewing

Chair : Yin Nin Chia (Singapore), Young Tae Kim (Korea)
EXHIBITION

The organizing Committee of ASGO sincerely thanks all exhibitors for their contributions and support.

- **DATE & TIME**
  - 2014. 08. 23 (Sat), 08:00-18:00
  - 2014. 08. 24 (Sun), 09:00-15:00

- **PLACE**
  - B1F Lobby, Asan Medical Center

- **SCALE**
  - 19 booths

EXHIBITION FLOOR PLAN

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<th>NO.</th>
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<td>19</td>
<td>Hanmi Pharmaceutical Co., Ltd.</td>
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SESSION I
NEW TRENDS IN THE MANAGEMENT OF CERVICAL CANCER

CHAIRS
Toshiharu Kamura (Japan), Soon-Beom Kang (Korea)

SPEAKERS
Updates in cervical cancer prevention and control
Hextan YS Ngan (Hong Kong)

Tailored radiation therapy: IMRT / Proton therapy
Won Park (Korea)

The evolution of treatment methods for cervical cancer in China
Zeyi Cao (China)
Cervical cancer can be prevented primarily by HPV vaccines and secondarily by screening and appropriate treatment.

Global vaccination of the currently registered 2 HPV vaccines is not implemented yet, although both are effective and safe. There were many reasons to this failure. The cost of the vaccines is one. New trials support the use of 2 doses instead of 3, which can not only reduce the cost but hopefully can improve the compliance. The other is doubt on its effectiveness in decreasing cervical cancer when implemented in a population. Numerous data from countries that had introduced population vaccination such as Australia, UK showed a dramatic decrease in abnormal cervical cytology, need for colposcopy as well as treatment for high-grade cervical intraepithelial neoplasia (HG CIN). The length of protection is another concern. Vaccines are likely to be effective for at least 20 years. Even if booster is needed, high antibody response had been demonstrated in both vaccines. However, the need for screening even after vaccination adds up the cost. The new nano-valent vaccines theoretically can prevent up to 90% of HG CIN and it is probably acceptable not to continue screening. Political will and community acceptance still remains as the biggest hurdle.

For secondary prevention, high risk HPV testing is more sensitive than conventional cytology screening. HPV testing has been used in triaging abnormal cytology and post-treatment monitoring of HG CIN. Countries like Australia, Netherland are planning to introduce HPV testing as a primary screening tool and USA has approved the use of Cobas® for primary screening for women over 25. The high negative predictive value can lengthen the interval of screening which is beneficial to both women and health care provider. However, the major challenge is the management of positive HPV test. We need a second triage in order to cut down on unnecessary colposcopy and treatment. Other than HPV16/18 in USA and Australia, cytology in Netherland, new tests are being explored, e.g. HPV RNA, methylation markers, P16 and Ki67.

In conclusion, there are still a lot of challenges in the primary and secondary prevention and control of cervical cancer which need our continuous effort and determination.
The evolution of treatment methods for cervical cancer in China

Zeyi Cao
School of Medicine, Tsinghua University, Beijing, China

From 1920s radiation therapy (RT) was the majority treatment for cervical cancer mainly using Radium by the first generation of gynecologic oncologists in China. From 1950s a few cancer hospital started to use external RT. Now we have an intensity modulated RT, a classical conformal RT and a concurrent chemoradiation therapy. From 1950s a few medical center such as Beijing, Shanghai, Tianjin, Chengdu, Guangzhou started the Abdominal Radical Hysterectomy only for stage I to IIa. From 1980s we used neoadjuvant chemotherapy before surgery especially for younger patients with stage IIb to IIIa cervical cancer for fertility preservation and good life quality. From 2000, we have performed more than 100 cases of trachelectomy of which 30% resulted in the successful pregnancy. We started to perform pelvic exenteration in 1980s and laterally extended endopelvic resection (LEER) in 2008 for recurrent cervical cancer.

During the last 30 years, the proportion of young cervical cancer patients increased from 10% to over 40%. Surgery is now the first choice of the primary treatment in about 90% of patients, partly because quality of life is one of the major concerns for the young patients. Most radical hysterectomy (80%) are performed abdominally, however, laparoscopic radical hysterectomy is rapidly increasing, now up to about 20% depending on doctor's experience and medical instrument.

We expect to use more and more new techniques to treat cervical cancer patients in the near future: personalized function-sparing surgery, minimally invasive surgery such as gasless laparoscopy, robot-surgeon with 3D micro-robot-hand, finger-feeling, and robot-handle operation, biochemotherapy, and optimal patient selection and new functioning material which can substitute for sacrificed organs, for example, pelvic floor muscle, bladder, urethra, anus, and vagina in exenteration and LEER.

Tailored radiation therapy : IMRT/Proton therapy

Won Park
Department of Radiation Oncology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea

For gynecologic cancer, radiotherapy has an important role to reduce the loco-regional failures and increase the survival. The delivery of radiation is being done with brachytherapy guided by radioactive isotope and with teletherapy using linear accelerator or proton therapy. Conventional radiotherapy or 3-dimensional radiotherapy is popularly done for gynecologic cancer. Intensity-modulated radiotherapy (IMRT) is a new technique of delivering radiation to target. IMRT is done with the use of intensity-modulated beams that can provide two or more intensity levels for any single beam. IMRT is suitable for treating complex treatment volume and avoiding close proximity organs at risk. As a consequence, IMRT may provide benefits in terms of increased tumor control through escalated tumor dose and reduced normal tissue toxicities through organs at risk sparing.

In dosimetric analysis, IMRT decrease the dose in adjacent normal tissues such as rectum, bladder, and small bowel and make uniform dose distribution in treated volumes. IMRT reduced acute and late adverse effects, including GI and GU adverse effects, compared with conventional radiotherapy. Several clinical outcomes treated with IMRT showed an improvement results retrospectively.

Proton therapy uses the physical characteristics of proton. At certain depth, the proton completes energy delivery and has no exit energy after Bragg peak. Proton therapy is a useful tool to treat the pediatric cancer, prostate cancer, liver cancer, brain tumor and re-irradiation patients. Compared with IMRT, proton therapy can decrease the irradiated volume and dose on adjacent normal tissues when it is delivered as boost treatment. However, until now there are no clinical data to confirm the effect of proton therapy to reduce the normal tissue toxicity. The proton therapy for gynecologic cancer is still investigational.

There is consideration for IMRT or proton therapy for gynecologic cancer. Over a course of radiation, there is organ motion and position and volume changes in tumor. It may induce out of target volume from radiation field and abnormal hot spots in adjacent normal tissues unpredictably. Prospective studies are needed to demonstrate the use of tailored IMRT or proton therapy and provide important data on toxicity and survivals.
SESSION II
SPECIAL ISSUES I:
FERTILITY PRESERVATION IN GYNECOLOGIC CANCERS

CHAIRS
Yasuhiro Udagawa (Japan), Hee-Sug Ryu (Korea)

SPEAKERS
Fertility preservation in cervical cancer
Xiaohua Wu (China)

Fertility preservation in endometrial cancer
Jeong-Yeol Park (Korea)

Fertility preservation in ovarian cancer
Woong Ju (Korea)
Young patients with cervical carcinomas are increasing. They have a strong desire to preserve fertility potential. Radical trachelectomy has become a viable option for these patients. Among many surgical approaches including vaginal, abdominal, laparoscopic and robotic radical trachelectomy, abdominal radical trachelectomy (ART) is most popular because ART is technically easy to perform compared with others.

Our successful ART experience in 86 patients with stage IB1 cervical cancer with tumors ≥2 cm suggests that a fertility-sparing procedure in young women with large tumor who would have otherwise been denied the option with no apparent compromise in oncologic outcome. However, this may result in higher rates of conversion to hysterectomy or the need for adjuvant chemotherapy or chemoradiation.

Using standardized techniques to compare the surgical and pathological outcomes for patients with early-stage cervical cancer after ART and abdominal radical hysterectomy (ARH), ART provides similar surgical and pathological outcomes as ARH. For the patients with tumors of 2 cm or greater, parametrial lymph nodes should be examined carefully. Further prospective data are urgently needed.

The preservation of the uterine arteries during ART has sometimes been performed but has seldom been tested. How much benefit does the patient get from uterine artery preservation? Using computed tomography angiography (CTA), we identified the uterine blood supply in patients who underwent ART with uterine artery preserved or sacrificed. The ovarian artery became the dominant supplying vessel after ART. The anatomically preserved uterine artery had an 87.5% chance of occlusion after the procedure. Moreover, the contributing uterine artery did not show any functional superiority. Thus, the benefit of preserving the uterine arteries during ART is probably very limited.
Endometrial cancer is the most common gynecologic cancer in developed countries. About 3-14% of endometrial cancers are diagnosed in young women under 40 who want to preserve their fertility. The incidence of endometrial cancer in this age group is increasing for which fertility-sparing therapy is increasingly used because it is one of the most important quality of life issues in these women. Progestin therapy is the most common type of fertility-sparing therapy. In this lecture, the most up-to-date findings regarding fertility-sparing progestin therapy for young women with primary and recurrent endometrial cancer is addressed in terms of diagnosis, treatment, follow-up, and oncologic and reproductive outcomes. Fertility-sparing progestin therapy is highly effective in selected young women with primary and recurrent endometrial cancer. The selection of appropriate patients through comprehensive pretreatment evaluation is of paramount importance to achieve the best outcomes without compromising survival. Because of the high rate of recurrence after successful fertility-sparing therapy, close surveillance is mandatory and prophylactic hysterectomy is the best option for patients who have completed family planning. Pregnancy outcomes are very promising with the aid of assisted reproductive technologies. Continuous daily oral medroxyprogesterone acetate and megestrol acetate are the preferred progestins for fertility-sparing therapy but future studies should be performed to determine the optimal dose and treatment duration of these agents.

Ovarian cancer has been paid less attention in fertility sparing treatment than other gynecologic cancers due to its nature of trans-coelomic spread. Standard treatment of ovarian cancers involves the removal of the uterus and adnexa followed by chemotherapy. On the other hand the needs for future fertility after treatment of ovarian cancer are rising because of several medical and social factors; improved oncologic outcome, early detection, delayed childbearing, and increased significance of quality of life issues.

Fertility-sparing procedures could be offered to women with ovarian cancer who are at early stage as well as low grade histology. The tentative criteria for fertility preservation in ovarian cancer include young women with invasive epithelial ovarian cancer with stage IA and non-clear cell histology Grade 1 or 2. Adjuvant chemotherapy can be performed in appropriate cases.

For malignant germ cell tumor of ovary, fertility preservation could be an option for advanced stages because germ cell tumor has been proved more effective to chemotherapy than epithelial ovarian cancer. Gynecologic oncologists should individualize the treatment for young women with early stage ovarian cancer after considering risk and benefit of fertility preservation. It should be implemented only in selected ovarian cancer patients who have a strong desire for future fertility.
SESSION III
SURGERY FOR GYNECOLOGIC CANCER (I)

CHAIRS
Kazunori Ochiai (Japan), Duk-So Bae (Korea)

SPEAKERS

Sentinel lymph node mapping in endometrial cancer
Hyun Hoon Chung (Korea)

Cytoreductive surgery in ovarian cancer: pelvis
Suk-Joon Chang (Korea)

Cytoreductive surgery in ovarian cancer: upper abdomen
Sang Yoon Park (Korea)

Pelvic exenteration and LEER for recurrent cervical cancer
Sang-Young Ryu (Korea)
Sentinel lymph node mapping in endometrial cancer

Hyun Hoon Chung
Department of Obstetrics and Gynecology, Seoul National University College of Medicine, Seoul, Korea

Lymph node status is a major prognostic element in endometrial cancer and affects the adjuvant therapy. The sentinel lymph node (SLN) procedure is proposed as an alternative to lymphadenectomy. This presentation aims to assess its methods and feasibility. It appears that double detection (colorimetric and isotopic) is better than single detection, independent of injection site. Hysteroscopic injection is technically more difficult, yet can be done near the tumoral lesion. The cervical site does not accurately reflect the lymphatic drainage of the uterine body but is easier to access. SLN detection rate is notably identical between these two injection sites. Para-aortic detection rate is lower for cervical injections than for endometrial injections. The intraoperative myometrial injection is also difficult to access, due to same limitations as the hysteroscopic route. The SLN allows for detecting micrometastases and isolated tumoral cells with the development of new pathological techniques such as serial sections and immunohistochemistry. Data on SLN in endometrial cancer is very heterogeneous in terms of methodology and populations studied. Despite being well-known, the SLN procedure in endometrial cancer remains in its feasibility stage. Its place in therapeutic strategies needs to be further verified and its potential benefit remains to be confirmed.
Cytoreductive surgery in ovarian cancer: upper abdomen

Sang-Yoon Park
Center for Uterine Cancer, Research Institute and Hospital, National Cancer Center, Goyang, Korea

More than 80% of patients with epithelial ovarian cancer have advanced-stage disease at the time of diagnosis at my office. Among the multiple survival determinations in these patients, the only clinician-driven dedication is the amount of residual tumor. The concept of optimal cytoreduction which is the most important prognostic factor in the treatment ovarian cancer has been changed. Recently large retrospective studies have demonstrated that the greatest survival benefit is accrued to those who have no gross residual disease after the initial surgical cytoreduction. As many as 42% of patients with stage IIIc ovarian cancer will have bulky (>1cm) disease in the upper abdomen above the greater omentum. These patients often require a more extensive upper abdominal cytoreductive surgical effort to achieve optimal cytoreduction. Upper abdomen surgical effort such as omentectomy, splenectomy, right and left diaphragmatic peritonectomy and/or resection, hepatic resection, tumor resection at Morrison’s pouch, portal hepatitis, and lesser sac, total or partial colectomy, supra-renal lymphadenectomy, chest surgery such as video-assisted thoracic surgery or transperitoneal cardiophrenic lymphadenectomy will be presented not only procedures but also results of National Cancer Center Korea.

Cytoreductive surgery for advanced ovarian cancer: Pelvis

Suk-Joon Chang
Gynecologic Cancer Center, Department of Obstetrics and Gynecology
Ajou University School of Medicine, Suwon, Korea

Ovarian cancer is the eighth most frequent cancer in women and remains one of the leading causes of deaths caused by female genital tract malignancies worldwide, with approximately 225,500 new cases and 140,200 deaths annually. The majority of newly diagnosed ovarian cancer patients present with advanced-stage disease. Primary cytoreductive surgery followed by taxane- and platinum-based combination chemotherapy is the cornerstone of contemporary management for advanced-stage ovarian cancer, and optimal cytoreduction is one of the most significant predictors of survival. Advanced-stage ovarian cancer frequently involves adjacent pelvic organs — uterus, rectosigmoid, and the pelvic peritoneum — by direct tumor extension. Extensive pelvic spread of tumor often causes distortion of the normal surgical anatomy and obliterates the cul-de-sac, which hinders the surgeon’s ability to completely remove the disease with conventional surgical staging procedures — total abdominal hysterectomy and bilateral salpingo-oophorectomy, and piecemeal dissection. The technique of en bloc pelvic resection of the pelvic tumor, uterus, adnexae, rectosigmoid colon, and pelvic peritoneum of the vesicouterine pouch and the cul-de-sac has been described for advanced-stage ovarian cancer with extensive pelvic organ involvement. In this lecture, I would like to introduce cytoreductive surgical procedures for optimal cytoreduction in advanced-stage ovarian cancer patients with extensive tumor involvement in the peritoneum of the cul-de-sac or rectosigmoid colon.
Pelvic exenteration and laterally extended endopelvic resection for recurrent cervical cancer

Sang Young Ryu
Department of Obstetrics and Gynecology, Korea Cancer Center Hospital, KIRAMS, Seoul, Korea

Although some researcher recommends ultra radical pelvic surgeries as a primary curative strategy, “en masse” removal of pelvic organ such as pelvic exenteration and laterally extended endopelvic resection (LEER) are primarily considered as curative modality in recurrent or persistent cervical cancers. Despite of high morbidity and mortality, survival rates of 30-60% after ultra radical pelvic surgery implicate a potential beyond palliation. The development of surgical technique, bleeding control devices, antibiotics, and peri-operative intensive care may contribute for the dramatic reduction of morbidity, however, the overall survival of ultra radical pelvic surgery has not been changed significantly from early reports.

In this sense, selection of appropriate patients who may be benefited by ultra radical pelvic surgery is the most critical step. Some researchers argue that the recently reported survival improvement may come from patient selection not from surgical extension. Several pathologic factors such as positive lymph node, lympho-vascular space invasion, close surgical margin, and tumor size more than 3 cm, are known to be associated with poor prognosis. To avoid unnecessary high morbidity-bearing extensive surgery, several strategies including preoperative PET scan, intra-operative frozen biopsy of lymph node, and diagnostic pelviscopy were suggested as methods to exclude the patients with high risk of failure. A tighter selection criterion for LEER includes : tumor size less than 5 cm, and a disease-free interval of at least 5 months.

Over the years, various classifications for pelvic exenteration have been proposed depending on the location of disease; anterior, posterior or total exenteration, and supra, trans and infra-levator exenteration. Because most morbidity is associated with urinary and anal diversion, recent surgical modification focused on to conserve urinary or anal function as far as it does not compromise the survival outcomes.

The basic assumption of ultra radical pelvic surgery is that cervical cancer cannot be cured with chemotherapy. Therefore, only extensive surgery gives the last chance to cure in case of failure after radiation therapy. Compared to ovarian and endometrial cancer, the spreading route of cervical cancer cell is considered to be rather predictable, and be easily removed by surgical intervention. However, despite the favorable survival outcome reported in selected patients, ultra radical pelvic surgery is an available option only in the qualified cancer center with multi-department surgical collaboration, psychological supporting and consulting team and perioperative intensive care system.
An Addition to Biomarkers for Epithelial Ovarian Cancer

Jae-Hoon Kim
Department of Obstetrics and Gynecology, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Korea

Tumor markers are substances produced by malignant tumors, which indicate the likely presence of cancer or provide information about its behavior. As the majority of markers are tumor-associated rather than tumor-specific, they lack specificity. Cancer antigen 125 (CA-125), the most commonly used tumor marker in ovarian cancer (OC), also lacks a specificity probably due to the serum concentration being reflective not only of the production of the antigen by the tumor but other factors that affect its release into the circulation. In the multimodal screening strategy, a low specificity of CA-125 can be overcome by use of transvaginal ultrasound (TVS) as a second-line test in women with elevated CA-125 levels, and high specificity (99.9%) can be achieved. Ovarian morphology has been used to refine algorithms for interpreting TVS in postmenopausal women with elevated CA-125.

Human epididymis protein 4 (HE4) is a potential new marker in OC, which is a glycoprotein in the epithelial cells of the epididymis. Mean serum HE4 in patients with malignant ovarian lesions is much higher than in women with benign lesions. HE4 levels are lower in many of the benign conditions in which, especially in women with endometriosis, CA-125 levels are usually elevated.

Recent developments with regard to the HE4 marker include its commercial availability (when combined with CA-125) as a test for preoperative prediction of low/high risk of epithelial OC as well as being approved by the U.S. Food and Drug Administration for monitoring recurrence or progression of OC.

The potential role of serum tumor markers is hampered by the fact that these markers are neither confined to the malignant tumor cell nor limited to the malignant phenotype. Serum CA-125 continues to be the most useful clinical marker in OC with an established role in diagnosis and monitoring whilst HE4 shows promise as a complementary marker. Progress in understanding the origin of OC may lead to identification of more promising markers that would distinguish Type I from Type II OCs, with implications for screening and differential diagnosis, as well as prognosis and monitoring treatment response.
MicroRNA strategy in ovarian cancer

Keun Ho Lee
Department of Obstetrics and Gynecology, The Catholic University of Korea College of Medicine, Seoul, Korea

MicroRNAs (miRNAs) are a class of small non-coding RNAs estimated to regulate the translation of mRNAs by inhibiting translation. Abnormal expression of miRNA has been observed in gynecologic malignancies including ovarian cancer.

While most deregulated microRNAs are down-regulated in other cancer, some are elevated and may represent novel oncogenes in ovarian cancer. Several microRNA profiling studies have identified changes in miRNA patterns that take place during ovarian cancer development and some of them may represent targets for therapy. In addition, some of the miRNA patterns may have prognostic significance.

Recent progress to reveal the role of miRNAs in ovarian cancer has been made, and a better understanding of the miRNA expression may provide a new way for the detection, diagnosis, and treatment of ovarian cancer.

The cancer genome atlas data mining

Chi-Heum Cho
Department of Obstetrics and Gynecology, Keimyung University School of Medicine, Daegu, Korea

The Cancer Genome Atlas (TCGA), a pilot project of the National Cancer Institute and the National Human Genome Research Institute, is a large-scale collaborative effort to understand the molecular basis of cancer through the application of genome analysis technologies, including but not limited to identifying mutations in DNA sequence, copy number variation and alterations in methylation status. The pilot project is focused on three types of cancers: glioblastoma multiforme (GBM), squamous carcinoma of the lung, and serous cystadenocarcinoma of the ovary.

TCGA Data Portal is a web-based platform for cancer researchers to search, download, and analyze data sets generated by TCGA. The portal contains all TCGA data sets pertaining to clinical information, genomic characterization, and high-throughput sequencing analysis of the tumor genomes. Data currently available through the portal include molecular characterization data sets for ovarian cancer, and molecular characterization, high-throughput sequencing, and clinical data for GBM. New data are derived on an ongoing basis from TCGA analyses and are deposited into databases for download in the portal.

Providing access to advanced analysis tools, the portal Access TCGA Data Portal : allows the user to select individual samples from multiple centers, platforms, and data types to create a customized about data set. In addition, users can search and download complete data archives as submitted by centers for clinical, characterization, and sequencing data of the tumor genomes.

Data from the TCGA Pilot Project provide researchers and clinicians with an early glimpse of what promises to become an unprecedented, comprehensive “atlas” of molecular information describing genomic changes associated with specific cancers. TCGA will ultimately enable researchers to analyze and employ the data in their own research to advance the molecular understanding of cancer and pave the way for a more targeted, personalized approach to cancer prevention and treatment.
Objectives: Patient-derived tumor xenograft model (“Avatar mice”) may provide more accurate and reliable information about individual patients’ tumor biology when compared with established cell line model. This study was designed to study the development of Avatar mice and their genetic and phenotypic stability for gynecologic cancer including ovarian, endometrial and cervical cancer.

Methods: Small pieces (3 x 3 x 3 mm) of human gynecologic cancer tissue (n=94) were meticulously grafted under renal capsules of female BALB/c-nude mice within 2 hr of surgical removal. Grossly visible tumor tissues serially transplanted for 2~5 generations. After the development of tumor in mice, phenotypic and genetic comparisons were performed between primary tumor and corresponding transplantable xenografts using H&E, Ion Torrent (AmpliSeq Cancer Panel), and array-comparative genomic hybridization (aCGH) analysis.

Results: Total tumor tissue engraftment rate was 37.2% (35/94) including ovarian cancer 32.8% (21/64), cervical cancer 47.6% (10/21) and endometrial cancer 44.4% (4/9). The mean time to the development of first generation in mice was 6.6 month in ovarian, 5.5 month in cervical and 4 month in endometrial cancer. Comparison of primary and Avatar tumor tissues showed highly similar histopathologic features. Moreover, analysis of Ion Torrent and aCGH indicated that all examined mutation and genomic alterations found in primary cancer tissues were precisely replicated in the corresponding Avatar tumors.

Conclusions: Avatar mice for human gynecologic cancer can be developed as a method of subrenal capsule implantation and have very similar phenotypic and genetic alteration of the original tissues. This has the potential to provide a very effective tool for future personalized therapy and for conducting translational gynecologic cancer research.
SESSION V
SPECIAL ISSUES II:
UPDATES IN THE MANAGEMENT OF GYNECOLOGIC CANCERS

CHAIRS
Ikuo Konishi (Japan), Soon-Do Cha (Korea)

SPEAKERS
HPV vaccination: the Malaysian experience
Suresh Kumarasamy (Malaysia)

Surgery for early stage cervical cancer: toward less-aggressive way
Jae-Weon Kim (Korea)

Ovarian cancer screening
Sarikapan Wilailak (Thailand)

Controversial issues in the management of endometrial cancer
Uma Devi (India)
Cervical cancer is the third most common cancer among women in Malaysia and accounts for 9.1% of total female cancers. The age standardized incidence of cervical cancer is 12.2 per 100,000. Although pap smear was introduced in Malaysia in 1969, there is no organized nationwide system and the screening is opportunistic with rates of ever having a pap smear being low: 26% in 1996 and 43% in 2006. A pilot project on implementing a call recall system was carried out in two regions in the country between 2008 and 2011. Unfortunately the response rates were low: 10.2%, 61.8% and 13.7% in the Malay, Chinese and Indian women, respectively. The annual total cost of managing cervical cancer was 60 million US$ in 2008. Of this, only 9.1% of the total cost went towards screening.

Malaysia was the first middle-income country in the world to implement a national HPV vaccination program in 2010. It is a school based vaccination program targeting girls at year 7 of school (13 years), with clinic based immunisation for out of school 13 year old girls. This program was very successful with 95.9% and 97.9% of parents giving consent for their daughters to be vaccinated and 97.9% and 95.9% of girls with parental consent completed all 3 doses in 2010 and 2011, respectively. In the first 2 years, the bivalent vaccine was used but in March 2012 there was a seamless change to the quadrivalent vaccine. The incidence of side-effects was 0.16% with the most common being central and peripheral nervous system (29.8%), application site (27.0%) and gastrointestinal (17.5%).

The reasons for the success of this program included endorsement and recommendation by the medical profession, political will and leadership, involvement of stakeholders early, predicting and managing potential risks as well as monitoring implementation closely. Other factors were a good existing school health program, “halal” certification of the vaccine (as over 60% of the population are Muslim), involvement of the Ministry of Education and giving sufficient information about the vaccine and its safety to parents.

In 2012 a catch up vaccination program was introduced targeted at girls aged 18 years. The Malaysian HPV vaccination program could be a model for the developing world, where organized and effective screening is unlikely to be successfully implemented soon.
Surgery for early stage cervical cancer: paradigm shift from Wertheim to conservative surgery

Jae-Weon Kim
Department of Obstetrics and Gynecology, Seoul National University College of Medicine, Seoul, Korea

As radical hysterectomy is sometimes associated with significant adverse effect such as urinary dysfunction, less radical or non-radical surgery for early stage cervical cancer to reduce morbidity while maintaining radicality has gotten widespread support by many gynecologic oncologists. Personally I also support less wide & conservative surgical approach. However, when we think about the case of invasive breast cancer, we will be acknowledged that in our field level I or II evidence is so scanty. In other words, there is a firm belief but no supporting evidence. Among the best known NSABP studies are protocol B-04 and B-06 which were started from 1971, more than 40 years ago! Based on the results of these trials breast surgeons nowadays rarely perform radical mastectomy which was originated from Halstedian principles of tumor growth and dissemination. Actually the concept of ‘radicality’, at least the terminology, in the treatment of cervical cancer was adopted from the Halsted school. They abandoned the concept and moved from radical to simple mastectomy to lumpectomy but still we are not, cannot yet till we get at least one RCT supporting less aggressive surgery. Somebody may argue that almost all the current surgical management of gynecological cancer is not derived from the phase III clinical trials. However, we cannot follow a detour. It will cause chaos. I would like to close with the maxim for surgeon viz, ‘new surgical approaches are uniformly recommended and adopted after phase II trials demonstrate superior safety, tolerability and/or effectiveness’.

Ovarian cancer screening

Sarikapan Wilailak
Department of Obstetrics and Gynecology, Ramathibodi Hospital, Mahidol University Faculty of Medicine, Bangkok, Thailand

Every year, more than 250,000 new cases of ovarian cancer are diagnosed worldwide. Women have a 1.4% risk of developing ovarian cancer in their lifetime. Early detection of ovarian cancer is a great clinical challenge because the symptoms are non-specific and most cases are diagnosed in advanced stage. The pre-cancer lesion has not been identified, therefore the aim of ovarian cancer screening is limited to firstly, an attempt to detect early-stage disease, and secondly, to differentiate between benign and malignant ovarian masses, in order to provide proper management. The practical tools for ovarian cancer screening are tumor markers and ultrasound imaging. Data from the US Prostate, Lung, Colorectal and Ovarian (PLCO) cancer screening trial which use a screening strategy incorporating CA125 cutoff and transvaginal ultrasound has not shown mortality benefit. The United Kingdom Collaborative Trial of Ovarian Cancer Screening (UKCTOCS) is using the Risk of Ovarian Cancer (ROC) time series algorithm to interpret CA125, which has shown an encouraging sensitivity and specificity, however, the mortality data has not been available yet. HE4, a glycoprotein regulated by WFDC2 gene, has a good performance in differentiating benign from malignant pelvic masses. Risk of Malignancy Algorithm (ROMA) by Moore et al, using HE4 combined with CA125 in a logistic regression model to provide an algorithm that estimated the risk of ovarian cancer in women with pelvic mass. ROMA seems to work well and better than conventional Risk of Malignancy Index in differentiating between benign and malignant pelvic masses. This result was confirmed in Asian population in our studies. We also created a risk prediction algorithm using HE4, menopausal status and ultrasound findings to calculate risk of ovarian cancer.

In conclusion, conventional ovarian cancer screening has not been proved to perform well. New tumor marker especially HE4 has been incorporated into models in combination with other parameters to predict malignancy in pelvic masses. This trend seems to work better, and still needs further evaluation.
Controversial Issues in the Management of Endometrial Cancer

K. Uma Devi

Department of Gynecologic Oncology, Kidwai Memorial Institute of Oncology, Bangalore, India

Endometrial cancer is the most common malignancy of female genital tract in the developed countries and less common among the women in developing countries. However, recent reports from national population based cancer registry reports that there is increase in the trend of endometrial cancer over the time using joint point regression from 1982 to 2010 among urban women in India. Unlike that of the industrialized nations, it is predominantly a disease of multiparous women, young women exposed to hormones for infertility evaluation and also associated with poly cystic ovarian disease.

In this presentation, the following controversial issues regarding the management of endometrial cancer will be addressed: 1) optimal treatment of incidentally found endometrial cancer after hysterectomy, 2) synchronous primary tumor in the endometrium, ovary, and cervix, 3) overall survival benefit and cost-effectiveness of routine comprehensive surgical staging, 4) feasibility of minimal invasive surgery as surgical staging, 5) the accuracy of preoperative diagnostic procedures, 6) the role fertility preserving surgery and conservative management in young patients, 7) survival benefit of adjuvant therapy, 8) the role of hormone therapy in recurrent endometrial cancer, 9) survival impact of old age and co-morbidity, 10) the role of frozen biopsy.
Laparoscopic Radical Hysterectomy

Dae-Yeon Kim
Department of Obstetrics and Gynecology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea

Laparoscopic radical hysterectomy (LRH) for the treatment of patients with early cervical cancer was first described in the early 1990s, but the acceptance of LRH has been slower than other laparoscopic oncologic surgical techniques and the use of LRH was limited to the patients with small tumor because of its technical difficulty and diversity of surgical techniques. However, with increasing experience, standardization of technique, and advances of laparoscopic instruments, the indication of LRH is extending to almost all patients with early cervical cancer and LRH is becoming a dominant paradigm in the surgical management of early cervical cancer. According to the currently existing data in the literature reported by several expert surgical teams through the world, there is no doubt that LRH is feasible and safe both surgically and oncologically. The rate of conversion to laparotomy was extremely low and the surgical safety profile was comparable to that of abdominal radical hysterectomy (ARH). The surgical outcomes were even more favorable in terms of operating time, estimated blood loss, transfusion requirement, postoperative complication rate, postoperative recovery, cosmetic results, and patients’ satisfaction. The local radicality and lymph node yield were also similar to those of ARH, and the recurrence rate and survival rate after LRH were also equivalent to those of ARH. Although the best way to evaluate the feasibility and safety of LRH is to compare LRH with ARH in a randomized controlled trial, such study is nearly impossible nowadays because patients will refuse to participate in the study if they were randomized to open surgery group. We believe that LRH can be safely performed in almost all patients with early cervical cancer without decrease in survival of patients and the surgical outcomes are superior to conventional open surgery if the surgery is performed by an experienced laparoscopic surgical team. The aim of this lecture is to present our surgical techniques for LRH and to discuss about the feasibility and indication of LRH and patient outcomes including complications after LRH based on our experiences.
Laparoscopic Surgery in Early Stage Ovarian Cancer

Jae-Kwan Lee
Department of Obstetrics and Gynecology, Korea University Medical Center, Seoul, Korea

Classically, laparotomy with a midline incision has been performed for the staging surgery in patients with ovarian cancer. However, minimally invasive surgical techniques are now frequently applied in gynecologic surgery although many physicians still continue to debate the use of laparoscopic surgery for ovarian cancer. Since the first study of laparoscopic staging by Querleu and Leblanc in 1993, a number of case series have reported the feasibility of laparoscopic staging in ovarian cancer. Nevertheless, laparotomy is still advocated because of several concerns: the potential for inadequate staging, tumor cell peritoneal dissemination with CO2 pneumoperitoneum, possibly a higher incidence of cyst rupture, and port-site metastases.

In terms of oncologic outcomes, several current data suggest that laparoscopy is safe and accurate compared with laparotomy. In the report by Ghezzi et al., the recurrence rate was 5% during the follow-up of 28.5 months, which was comparable with that after open surgical staging; 3-18%. However, no firm conclusions can be drawn regarding the oncological outcomes between the different surgical approaches, the majority studies regarding laparoscopic staging lack consistency of surgical procedures, short followed-up time and no published randomized trials comparing laparoscopy with laparotomy for staging.

In summary, a number of studies demonstrated that laparoscopic staging in early stage ovarian cancer is at least as safe as that previously reported by laparotomy, with appropriate and similar oncological outcomes while maintaining the advantages of minimal access surgery. To draw clear conclusion, randomized trials with longer follow-up are needed. Therefore, Korean Gynecologic Oncology Group (KGOG) 3028, one of the ongoing trials, is expected to add outstanding data to answer the questions about not only the surgical feasibility but also the oncological safety.

Abdominal radical trachelectomy: Where are we now?

Ikuo Konishi
Department of Gynecology and Obstetrics, Kyoto University Graduate School of Medicine, Kyoto, Japan

Cervical cancer is the second most common cancer in women in developing countries, and still serious also in developed countries. In Japan, we encounter many young women with cervical cancer who desire fertility-preservation because of the current trend of late marriage and pregnancy. We also encounter women with cervical cancer in early pregnancy. For fertility-sparing surgery, abdominal radical trachelectomy (ART) is commonly used in Japan. For cervical cancer in early pregnancy, we perform neoadjuvant chemotherapy followed by radical hysterectomy at Cesarean delivery. In this lecture, we will discuss controversial issues on radical trachelectomy and chemotherapy during pregnancy.

ART is indicated for women usually less than 40 years having cervical cancer stage IB1 with tumor size less than 2 cm. During surgery, if lymph node metastasis is detected, the operation is converted to hysterectomy. We adopted intraoperative pathological diagnosis and detection of sentinel lymph nodes. Since 2010, we operated 17 patients; 16 underwent trachelectomy and one hysterectomy due to positive margin. There have been no recurrences, and postoperative complications were pelvic infection (4), cervical canal stenosis (2), and amenorrhea (1). Among 5 women having desire of pregnancy, one had delivery at 32 weeks of gestation.

Neoadjuvant chemotherapy with cisplatin and paclitaxel was given for 2 pregnant women with cervical cancer. The chemotherapy was very effective, and we performed radical hysterectomy at Cesarean delivery. There were no apparent adverse effects of anticancer drugs for children.

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In summary, a number of studies demonstrated that laparoscopic staging in early stage ovarian cancer is at least as safe as that previously reported by laparotomy, with appropriate and similar oncological outcomes while maintaining the advantages of minimal access surgery. To draw clear conclusion, randomized trials with longer follow-up are needed. Therefore, Korean Gynecologic Oncology Group (KGOG) 3028, one of the ongoing trials, is expected to add outstanding data to answer the questions about not only the surgical feasibility but also the oncological safety.
Robotic Surgery in Cervical Cancer

Kung-Liahng Wang

Department of Obstetrics and Gynecology, Mackay Memorial Hospital, Mackay Medical College, Taipei, Taiwan

Cervical cancer is the most common gynecologic cancer in the world. Although more and more gynecologic surgeons perform laparoscopic radical hysterectomy for the management of early stage cervical cancer, laparoscopic radical hysterectomy has not seen widespread adoption because of technical difficulties, long surgeons' learning curve and long operative time. In addition, counterintuitive hand movements, two-dimension visualization, and limited degrees of instrument motion within the body as well as ergonomic difficulty and tremor amplification constitute other obstacles for acceptance and wide application of laparoscopic radical hysterectomy. Ever since the approval of DaVinci robotic surgical system for gynecologic surgery by FDA in 2005, many institutions have published several series documenting its feasibility and benefits over laparoscopy in the management of cervical cancer. The rapid adoption of robotic assisted surgery in cervical cancer treatment is attributed to the advantages of 3D vision, wristed instruments and improved ergonomics. In my experience, the complication rate of robotic radical hysterectomy is much lower than that of laparoscopic radical hysterectomy in the hands of experienced gynecological oncologists. I believe, in the future, robotic radical hysterectomy will become a popular and widespread alternative to conventional surgery in the management of patients with early stage cervical cancers by gynecologic oncologists.
Asian medical writers who attempt to publish articles in English-language journals commonly make several types of error. In this presentation, I describe writing mistakes I frequently encounter as an editor of manuscripts for Japanese writers. 1) Japanese writers are often more familiar with abbreviations than the full English terms. They use abbreviations extensively when writing in Japanese and continue to use abbreviations similarly when writing in English. They often abbreviate all terms for which abbreviations exist, without regard for the number of times the term appears and without explaining what the abbreviations mean. Such overuse of abbreviations increases the risk of misunderstanding, for both native and nonnative readers of English. 2) Although “direct plagiarism” of previously published material has attracted the most attention, other types of plagiarism, such as “mosaic plagiarism” and “insufficient acknowledgment,” are likely more common but less often detected or reported. Plagiarizing authors are perhaps unaware that what they are doing constitutes plagiarism or believe that their plagiarism is a petty “victimless crime” that no one will detect, report, or punish them for. 3) Japanese medical writing is often “inhumane” in that patients are described with some of the same words used to describe diseases, animals, and treatments. 4) Writers who are not fluent in English often try to compensate by using a stiff and overly formal “scientific style” that favors jargon, overuse of the passive voice, long nouns and nonspecific verbs, and “it” and “there” as subjects. 5) Much medical writing in Japan is edited by native English-speaking laypersons in a process known as “native check.” Because such editors often have no qualifications other than being born in an English-speaking country, the resulting manuscripts might have a superficial grammatical correctness but do not meet current standards for word usage and style.
What Does the Editors Expect of Reviewers?

Chulmin Lee
Department of Obstetrics and Gynecology, Inje University Sanggye Paik Hospital, Seoul, Korea

Publishing a scientific journal is an orchestrated serial process by multiple individuals starting from the idea of author. During the process of reviewing, a small flaw in ethics of author, peer-reviewer or editor could turn a good and valuable thesis into a shabby piece of paper and even incur criminal or civil litigation. Therefore, a high level of morality is a prerequisite in every step of publication of a scientific paper. Most of renowned journal had established some forms of code of conduct. However, it was not until by the end of 20th century that the editors gathered and earnestly proposed widely accepted guidelines of ethics. It was the technical evolution of internet in this period that fueled the organization of journal reviewing process and eased the probation of fraud such as plagiarism.

Committee on Publication Ethics (COPE), which was established in 1997 by a group of British editors, is one of the active international organization that establishes the ethical guidelines for constituents of journal publication and shares the vast amount of cases of misconduct via their web site. Peer review, by a definition suggested by Wikipedia, is the evaluation of work by one or more people of similar competence to the producers of the work. And moral issues may loom when the reviewer himself is working in a close or even the same field of the author and entangled with him by any form of interest. Therefore, a reviewer should arm himself with morality suggested by general guidelines and the editor should bear the responsibility of supervision and verification. The backbone of the ethical guidelines for peer reviewers presented by COPE is as follows. Peer reviewers should have proper expertise, respect the confidentiality, not use the information obtained for other purpose, declare all potential conflicting interest, not be biased on the authors characteristics, be objective and constructive, carry out reviewing in a timely manner, be courteous and not impersonate another individual. In other words, reviewers should be prompt, objective, specific and avoid acrimony.

To guarantee the quality of the paper and eventually the journal, the reviewers should meet the standards of morality.

Manuscript preparation before submitting to the JGO

Sokbom Kang
National Cancer Center, Korea

The Journal of Gynecologic Oncology (JGO) is an official publication of the Asian Society of Gynecologic Oncology, which was launched in 1990. The JGO’s aim is to publish the highest quality manuscripts dedicated to the advancement of care of the patients with gynecologic cancer. The journal’s 2013 impact factor is 1.600. Although the journal has a detailed list of the submission requirements regarding manuscript format, unfortunately, many authors who submit their research to the journal do not strictly follow the journal’s guideline. In this speech, we will review its submission requirements and guidelines.
# LIST OF ASGO YOUNG DOCTORS

## CHINA

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## PHILIPPINES

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## SRI LANKA

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<td>Sarada Kannangara</td>
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Small interfering RNA targeting Multidrug Resistance 1 inhibits Growth of ovarian cancer Cell and increases efficacy of chemotherapy in vivo

Fu-jun Liu, Guo-lan Gao, Kai-jia Tu, Li-qun Yu, Jun Gao
Department of Obstetrics and Gynecology, Aviation General Hospital of China Medical University, Beijing, China

Objective: To further validate a knockdown approach for circumventing the multidrug resistance 1 (MDR1), we used small interfering RNA (siRNA) targeting MDR1 to inhibit the expression of MDR1 and P-glycoprotein (P-gp) in vivo.

Methods: Ascitic tumor xenografts were established by implanting human ovarian carcinoma cells SKOV3/AR intraperitoneally into the nude mice. The mice were randomized into the following three treatment groups with six mice in each group: Taxol, Taxol with lipofectamine and Taxol with siRNA/MDR1-lipofectamine intraperitoneal injection. The tumor growth rate and the ascites growth rate were assessed. The expressions of MDR1 and P-gp in mice were determined by reverse transcription-polymerase chain reaction and immunohistochemistry, respectively.

Results: The growth of tumors and ascites in mice treated with Taxol plus siRNA/MDR1-lipofectamine was significantly inhibited compared with those in mice of other groups. After 28 days’ treatment, the average tumor weight and ascites volume decreased by 43.6% and 29.7% in the group treated with Taxol plus siRNA/MDR1-lipofectamine compared with these treated with Taxol alone ($P<0.001$). The expressions of MDR1 and P-gp in the group treated with Taxol plus siRNA/MDR1-lipofectamine were also decreased compared with those in the group treated with Taxol alone ($P<0.001$).

Conclusion: SiRNA targeting-MDR1 can effectively and specifically suppress the expression of MDR1 (P-glycoprotein) and inhibit ovarian cancer growth in vivo.

Vulvar reconstructive surgery using “supra-fascial” lotus petal flap following radical vulvectomy

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Objective: The aim of this presentation is to report our experience with the supra-fascial lotus petal flap following radical vulvectomy.

Methods: A total of 26 patients underwent primary resection of the tumor followed by immediate reconstructive surgery with lotus petal supra-fascial flap from 2009 to 2013. The age of patients ranged from 45 to 77 years, with a mean age of 58 years. The flap was based on perineal branches of internal pudendal artery.

Results: The mean operating time for the flap harvesting and reconstruction was 34 minutes. Neither any flap failure nor any necrosis was observed except for one apical flap necrosis in a patient with sickle cell trait. All of the wounds healed uneventfully. Structural and functional evaluation beyond six months showed low donor site morbidity and good aesthetic results.

Conclusion: Supra-fascial lotus petal flap seems an easy, less time consuming and reliable method for immediate vulvar reconstruction following radical vulvectomy. It could provide good cosmesis and function of the vulva with tension free repair after tumor removal. The lotus petal flap also provides for minimal morbidity at the donor site.
Clinical and Pathologic Features of Primary Peritoneal Serous Carcinoma

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Objectives: To study the clinical, pathologic profile, outcome and prognostic features of primary peritoneal serous carcinoma (PPSC).

Methods: A five year retrospective study of PPSC diagnosed and treated at our center was conducted. Majority of the patients underwent upfront de-bulking surgery. Postoperatively, six cycles of combination chemotherapy with triweekly paclitaxel and carboplatin were administered. Event-free survival (EFS) was evaluated for stage and surgical adequacy.

Results: The median age at presentation was 56 years. Among 374 patients treated for ovarian cancer during the study period, 10 PPSC cases (2.7%) were diagnosed histopathologically. The two (20%) of the 10 cases had family history of breast and ovarian cancers, two (20%) cases had been diagnosed as abdominal tuberculosis (TB) prior referral to our center. Radiological presentation includes gross ascites, omental cake and normal adnexa. The eight (80%) of 10 cases presented with stage IIIC and other two cases (20%) with stage IV disease. The eight underwent upfront surgery; six (75%) of the eight cases had optimal cytoreduction and the other two (25%) suboptimal cytoreduction. Two with stage IV disease received neoadjuvant chemotherapy followed by interval cytoreduction. After debulking surgery the most useful IHC marker include CK7+, CK20-, CA125+, WT-1+, and GCDFP- . At median follow up of 24 months (range 3-60 months), the median progression free survival (PFS) was 22 months, while the estimated 5-year PFS was 18%. Stage IV disease and suboptimal surgery had poor outcome.

Conclusion: The PPSC presents with advanced stage disease and can be misdiagnosed as abdominal TB in tropical countries. The GOG criteria and immunohistochemistry complement the diagnosis. PPSC has poor outcome despite optimal care, highlighting need for larger studies on this disease.

Keywords: Abdominal TB, Primary peritoneal carcinoma, Regional cancer institute.

Systematic Lymphadenectomy during Interval Debulking Surgery in Advanced Ovarian Cancer: 1-Year Outcome

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Objective: Systematic lymph node dissection (SLND) during interval debulking surgery (IDS) is debatable in advanced ovarian cancer. Nodal metastases in stage IIC/IV ovarian cancer range from 3% to 86%. Proponents of SLND claim an improved 5-year disease specific survival, depending upon the extent of dissection and number of nodes harvested.

Methods: A retrospective cohort of 51 patients undergoing IDS for stage III/IV Ovarian, primary peritoneal, and fallopian tubal cancer from August 2011 to June 2013 were identified and analyzed at 12 months following treatment completion using the clinical information database system.

Results: SLND was carried out for 49 of 51 patients undergoing IDS. Median LN yield was 24 (3-62), 12 (1-36) for pelvic and 10 (1-31) for para-aortic LNs. Total nodal positivity was 59.2% : 21/49 (42.85%) for pelvic and 17/47 (36.17%) for the para-aortic group. Nine of 49 (18.4%) had metastasis at both pelvic and para-aortic LN, 20/49 (40.8%) either pelvic or para-aortic LNs, 20/49 (40.8%) had no LN metastasis. In 9 patients with both LNs positive, 88.9% patients recurred. Mean time to recurrence was 5.1 months and 44.4% died at 12 months. In those with either LN positive, 57.9% recurred, mean time to recurrence 6.7 months and 20% died at 12 months. 42.1% of patients with negative LN recurred, time to recurrence was 6 months with 21% alive at 12 months.

Conclusion: Both pelvic and para-aortic node positivity is associated with increased recurrence and reduced survival at 12 months, when compared with either or no nodal positivity. SLND may be considered during IDS for optimal cytoreduction.
Patterns of Metastases, Treatment and Outcome in Relapsed Granulosa Cell Tumors of The Ovary: Is Maximal Cytoreduction Worth an Effort?

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Objective: Granulosa cell tumors (GCT) of ovary constitute about 3-5% of all ovarian tumors. GCT is uncommon tumor of ovary with an indolent course and late recurrences. The aim of this study was to identify various patterns of metastases, its impact on management and survival, and to study the various treatment protocols adopted and the corresponding outcomes.

Methods: Fifty cases of adult GCT who presented to our institute between January 2005 and December 2012 were identified. Ten cases of recurrences were analyzed.

Results: Median age at primary presentation was 39 years (range, 25-45 years). There were 8 stage 1A (80%), 1 stage 1C (10%), and 1 stage 2C (10%). Median time for relapse was 105 months (range, 12-180 months). 2-year survival after first recurrence was 70% with a median follow up of 33 months after first relapse (range 2-81 months). 2-year disease-free survival following the first relapse was 83% for optimally cytoreduced, none for suboptimally cytoreduced patients or chemotherapy only regimen patients.

Conclusion: GCT of ovary differs in its presentation at recurrence with multivisceral involvement in abdominopelvic region and even distant metastases to lung and bone in a few. However, recurrent tumors can be salvaged and long time remissions can be achieved if complete cytoreductive surgery is possible.

Correlation of Kartu Delgado score with recurrence-free interval in stage IB1-IIA2 cervical cancer patients with intermediate risk factors after radical surgery and adjuvant radiotherapy

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Objective: Intermediate risk of recurrence in cervical cancer after radical hysterectomy includes bulky tumor, lymphovascular space invasion, and deep stromal invasion of which two or more indicate the need of adjuvant radiotherapy. This study aims to determine the correlation recurrence-free interval (RFI) with Kartu Delgado scoring system in women with early stage cervical cancer after surgery.

Methods: Fifty patients were eligible. Twenty one patients were given adjuvant radiotherapy following surgery based on their Kartu Delgado score as follows: score <120, observation; score >120, adjuvant radiotherapy. Correlation between Kartu Delgado score and RFI was evaluated with scatter graphic and Pearson correlation test.

Results: Eighteen recurrences occurred during this study: thirteen from 2009-2010 and five from 2011-2012. We found that patients with higher Kartu Delgado score had shorter RFI than those with lower Kartu Delgado score (p = 0.0003). We reported if kartu Delgado score was more than 120, then RFI would be less than 42 months.

Conclusion: Our data showed that there was a significant correlation between Kartu Delgado score and RFI. RFI of the patients with high Kartu Delgado score in intermediate risk group appeared shorter than that of the patients with low Kartu Delgado score.

Keywords: Cervical carcinoma, Radical hysterectomy, Intermediate risk, Recurrence-free interval.
Primary Radical Hysterectomy with Laterally Extended Parametrectomy and Therapeutic Lymphadenectomy for Stage IIB Cervical Cancer: a Preliminary Report from Indonesia

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Objective: The initial treatment for stage IIB cervical cancer largely varies through different centers, including concurrent chemoradiation and neoadjuvant chemotherapy followed by radical surgery. Until today, there is no evidence of clear superiority of one strategy to the other. In Indonesia, stage IIB has been treated either with radiation or chemoradiation. We aim to explore primary radical hysterectomy with laterally extended parametrectomy (Mibayashi’s technique) to evaluate safety and overall survival.

Methods: Four consecutive stage IIB cervical cancer patients underwent primary radical hysterectomy in April-May 2014 in Cipto Mangunkusumo Hospital and Pantai Indah Kapuk Hospital. Perioperative morbidities were assessed.

Results: Tumor size ranged from 6 to 8 cm. All the tumors were squamous cell carcinoma. Mean operation time was 7.25 hours (range, 5 hours to 11 hours) and mean estimated blood loss was 900 mL (range, 700 mL to 1300 mL). There was neither injury on gastrointestinal tract, urinary tract, and nerves nor intensive care unit admission. All patients started ambulation on the first day after operation. Two patients needed self-catheterization until postoperative day 29 and 30, respectively. Mean hospital stay was 9 days (range, 7 days to 14 days).

Conclusion: Our findings suggest that primary radical hysterectomy with Laterally Extended Parametrectomy (Mibayashi’s technique) in stage IIB cervical cancer patients is feasible without any severe surgical complication and shows promise in treating this group.

Keywords: Primary radical hysterectomy with laterally extended parametrectomy, Stage IIB Cervical Cancer, Perioperative morbidity, Preliminary report, Indonesia

A Randomized Controlled Trial of Laparoscopic Versus Conventional Hysterectomies

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Objectives: To compare the outcome measures which including operating time, blood loss, rate of complications, consumption of analgesics, and length of hospital stay of total laparoscopic hysterectomy (TLH), laparoscopic-assisted vaginal hysterectomy (LAVH), vaginal hysterectomy (VH) and total abdominal hysterectomy (TAH).

Methods: A prospective, randomized study was performed at Gynecologic Surgery Department of National Cancer Center in Mongolia between March 2013 and March 2014. A total of 120 women indicated to undergo hysterectomy for cervical cancer stage 0-4, myoma, and uterine cancer were randomly assigned to four different groups (30 VH, 30 LAVH, 30 TLH and 30 TAH).

Results: The groups were significantly different for mean intraoperative blood loss (119±54.7 mL, TLH vs. 127.5±52.7 mL, LAVH vs. 145±57.8 mL, VH vs. 210±77.4 mL, TAH; p=0.008) and operative time (115±16.6 mins, TLH vs. 112.5±18.5 mins, LAVH vs. 51.6±16.9 mins, VH vs. 69±18.2 mins, TAH; p<0.001). The mean weights of uterus were from 95.1±27.6 g (range 58-140 g) for VH, to 181.2±97 g (range 76-400 g) in the LAVH, and to 122.3±64 g for TAH. Length of postoperative days until which patients requested analgesics in TAH group were 5.5±0.7 days, which was higher than that of the other three groups (3.0±0.8 days, TLH vs. 3.0±0.8 days, LAVH vs. 3.0±0.86 days, VH; p<0.001). LAVH was associated with a reduced hospital stay (TLH : 3.3±0.7 days, LAVH : 3.3±0.6 days, VH : 3.7±0.6 days; TAH : 6.5±0.7 days; p<0.001). TLH had the longest operating time (115±16.6 mins), a low complication rate, lack of severe postoperative complications. VH had the shortest operating time (51.6±16.9 mins). However, there were technical problems with salpingo-oophorectomy from the vaginal approach and this group had a significantly higher rate of febrile complications (20%) compared to LAVH (2.3%) and TAH (16%).

Conclusion: TLH and LAVH have advantages over TAH in that TLH and LAVH have less intraoperative blood loss, less postoperative analgesic requirement, and a shorter duration of postoperative hospital stays.

Keywords: abdominal, hysterectomy, laparoscopy, prospective, randomized, vaginal hysterectomy
Laparoscopic vs vaginal hysterectomy for early-stage cervical cancer

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Objective: To compare length of stay, blood loss, operative time, and pain of laparoscopic and vaginal hysterectomy procedures in women diagnosed with early-stage cervical cancer.

Study Design: This was a prospective, randomized, controlled comparison between vaginal (VH) and laparoscopic (LH) hysterectomy among 60 consecutive patients with early-stage cervical cancer without uterine prolapse. From September 2012 to August 2013, patients referred to the Department of Gynecologic Surgery of National Cancer Center (Ulaanbaatar, Mongolia) were followed up for 12 months.

Results: The groups were significantly different for mean operative time (VH: 51.6 ± 16.9 minutes; LH: 112.5 ± 18.5 minutes; P = .003) and blood loss (LH: 127.5 ± 52.7 mL; VH: 145 ± 57.8 mL; P = .004). Baseline characteristics were similar between two groups. There were no intraoperative complications in both groups. LH was associated with a reduced hospital stay (LH: 3.08 ± 0.7 days; VH: 3.7 ± 0.6 days; P < .001). In addition, no differences between the groups at the follow-up.

Conclusion: Laparoscopic hysterectomy results in a shorter hospital stay, less blood loss, and less postoperative pain compared with vaginal hysterectomy.

The accuracy of risk of malignancy index in differentiating ovarian masses

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Objective: Risk of malignancy index (RMI) is a scoring system for predicting malignancy of ovarian mass based on menopausal status, CA 125 level and ultrasound examination. The aim of this study was to investigate the accuracy of RMI in discriminating benign and malignant diseases.

Methods: Cross-sectional study was carried out at Central Women’s Hospital, Mandalay from February, 2010 to January, 2011. Thirty-eight women were included. Serum CA 125 and ultrasound scanning were done for preoperative assessment. RMI was calculated. The association between RMI and histopathological results were studied. Sensitivity and specificity of RMI were calculated.

Results: Twenty-one were benign cases and 17 were malignant. Mean age of women with benign and malignant mass was 43.33 ± 15 years and 46.23 ± 19.2 years, respectively. Twenty-two patients were premenopausal and of these, 15 had benign lesions and 7 had malignant lesions. Sixteen patients were postmenopausal women, of whom 6 had benign lesions and 10 had malignant lesions. In benign group, 12 patients (57.1%) had ultrasound score one and 9 patients (42.9%) had ultrasound score three. Serum CA 125 level ≥ 30 U/ml was found in 6/21 (28.6%) with benign masses and 14/17 (82.4%) with malignant ovarian masses. The sensitivity and specificity of menopausal status were 58.8% and 71.4%, respectively and that of ultrasound score were 100% and 57.1%, respectively. Serum CA 125 level had a sensitivity of 82.4% and a specificity of 71.4%. The sensitivity, specificity, positive predictive value and negative predictive values of RMI were 94.1%, 95.2%, 94.1% and 95.2%, respectively.

Conclusion: Concerning the prediction of malignant ovarian cyst, RMI is useful to differentiate between benign and malignant ovarian mass.
Correlation between Visual Inspection of Cervix with Acetic Acid and Pap Smear for Cervical Cancer Screening in Teaching Military Hospitals

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Objective: The aim of this study is to compare visual inspection of the cervix with acetic acid (VIA) and Pap smear in cervical cancer screening in teaching military hospitals.

Methods: A total of 100 married women aged 20-50 years who visited teaching military hospitals in 2012 were included in this study. The participants were interviewed using standard questionnaires after obtaining informed consent. Each participant was subjected to cervical cancer screening in the following order: cytological examination and then visual inspection of cervix with 5% acetic acid. Cervical biopsy was performed for patients with VIA positive and abnormal Pap smear. Sensitivity, specificity, positive and negative predictive values of the VIA and cytology tests for screening of cervical abnormalities were calculated.

Results: The sensitivity of VIA (87.5%) was similar with cytology (87.5%), the specificity of VIA (97.5%) was slightly higher than that of cytology (96.7%). There was no significant difference of negative predictive value between the two tests. The positive predictive value of VIA (77.7%) was higher than that of cytology (70.5%). Agreement of the two test results was excellent with \( \kappa \) value of 0.826. The results of VIA were comparable to that of cytology, and the difference between VIA and cytology was statistically significant (p value < 0.001).

Conclusion: Our findings suggest that VIA shows comparable diagnostic performances with Pap smear for screening cervical abnormalities in women visiting teaching military hospitals in Myanmar.

Clinical presentation and management of malignant germ cell ovarian tumors in a single institution of Nepal

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Objective: Germ cell malignancies account for about 5% of all ovarian cancers. These tumors grow rapidly and often produce symptoms quicker than the slow growing epithelial tumor. Commonly seen in the first two decades of life germ cell malignancies are highly chemosensitive and are potentially curable with surgery and chemotherapy. This study aims to analyze the clinical presentation and management outcomes of malignant germ cell tumors managed in B.P. Koirala Memorial Cancer Hospital, Nepal.

Methods: Descriptive study conducted in B.P. Koirala Memorial Cancer Hospital, Nepal. Medical records of the patients with malignant germ cell tumors who attended the hospital from 1999 to 2009 were analyzed regarding medical history, clinical examination, investigations, treatment, follow-up and outcomes measured.

Results: Total 65 cases of malignant germ cell tumors with age range from 2 to 58 years (mean 21.7 years) were identified. 42% cases were Tibeto-Burmese; 30% were Indo-Aryans. There were 15 cases (23%) of dysgerminoma, 21 (32%) endodermal sinus tumors, 16 (24.5%) immature cystic teratomas, 9 (14%) mixed germ cell tumors, 2 (3.5%) unclassified germ cell tumor and 2 (3.5%) malignant transformation from teratoma. Thirty three (49.5%) patients had early stage disease, 37 (57%) underwent fertility preserving surgery. Four cases (9%) due to disseminated disease, underwent neoadjuvant chemotherapy followed by debulking surgery. Fifty one cases (78.5%) received adjuvant chemotherapy (BEP or EP regimen). The overall survival was 70%.

Conclusion: Early stage germ cell malignancies can be safely managed by fertility preserving surgery followed by chemotherapy, if indicated. For advanced diseases, neoadjuvant chemotherapy followed by surgery can be undertaken with curable intent.
The association of Reproductive and Hormonal Factors with the Risk of Ovarian Tumor: a Case Control Study

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Objective: To study the association of the reproductive and hormonal factors with the risk of ovarian tumor.

Methods: A prospective study was conducted in Nepal from April 2011 to April 2012 after the approval of the Institutional Review Board. Informed consent was taken from all study population. Sixty five cases and their matching controls within ±5 years were enrolled into the study and analyzed.

Results: Neither reproductive factors including age at menarche, parity, breast feeding, age of first birth, tubal ligation, and hysterectomy nor hormonal factors including the use of oral contraceptive or other hormonal contraceptive was statistically related to the risk of ovarian tumor. The late age of menopause and late age of last birth were significantly associated with the risk of ovarian tumor (both, p<0.001)

Conclusion: Late age at menopause and late age of last live child birth are associated with the decreased risk of ovarian tumor.

Keywords: Ovarian tumor, reproductive, hormonal, risk factors

The Expression and Clinical Significance of Clusterin and Ki67 in Cervical Cancer

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Objective: To explore the expression pattern and clinical significance of the clusterin and proliferation indices ki67 in cervical cancer.

Methods: Fifty nine cervical cancer cases (31 squamous cell carcinoma [SCC], 19 adenocarcinoma, 9 small cell carcinoma) treated at Cancer Center Sun Yat- sen University during 1989-2006 were enrolled in the study. The relationship between clinical factors and the expressions of clusterin and Ki67.

Results: Custerin was weakly positive in 10% (3/31) of SCC and 21% (4/19) of adenocarcinoma, however, moderately positive in 11% (1/9) of small cell carcinoma. In Control groups, clusterin was weakly positive in 21% (3/14) of cervical intraepithelial neoplasia (CIN) 2-3 and 14% (2/13) of normal squamous epithelium. Clusterin expression was found 100% (31/31) of normal endocervical glands. The Ki67 was weakly positive in 13% (4/31) of SCC and 5% (1/19) of adenocarcinoma. All cases with small cell carcinoma was negative for Ki67 expression. There was no significant difference of clusterin and Ki67 expression between normal cervical epithelium, CIN 2-3 and SCC. Neither was between normal endocervical gland and adenocarcinoma. The expression of clusterin and Ki67 had no correlation with FIGO stage, SCC antigen level, grade of differentiation, deep stromal invasion and lymph node metastasis. The expressions of clusterin and Ki67 were not related to the 5-year disease-free survival, and clusterin expression was not correlated with Ki67 expression (r=0.500, P=0.391).

Conclusion: The expressions of clusterin and Ki67 were weak in cervical cancer, and were not associated with any clinicopathological features. The further larger studies are needed to verify the results of this study.

Keywords: clusterin, Squamous Cell Carcinoma, Cervical cancer
Placental site trophoblastic tumor, a rare gestational trophoblastic neoplasia: a case report and review of literature

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Placental site trophoblastic tumor (PSTT) is a relatively uncommon form of gestational trophoblastic neoplasm (GTN). A 6-year database review from 2008 to 2013 at the Section of Trophoblastic Disease revealed only 1 case of PSTT managed.

The patient is a 27 year-old female who presented with persistent vaginal bleeding for three months after a full term delivery. Pelvic examination and ancillary procedures suggest a primary impression of GTN. She underwent emergency laparotomy with total hysterectomy for an impending uterine rupture and started a single agent chemotherapy based on the diagnosis of GTN. Histopathologic examination with immunohistochemistry panel on the hysterectomy specimen revealed a PSTT.

This paper presents the clinical presentation and management of a PSTT encountered at the Philippine General Hospital and reviews the latest literature in the diagnosis and treatment of this rare GTN.

Keywords: Placental site trophoblastic tumor, Gestational trophoblastic neoplasia

Incidence and Risk Factors of Vulvar Intraepithelial Neoplasia: a Tertiary Government Hospital Experience

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Vulvar Intraepithelial Neoplasia (VIN) is a pre-cancerous lesion involving the squamous epithelium of the vulva. Prompt diagnosis and appropriate treatment of these pre-invasive lesions aim to prevent its progression to vulvar carcinoma. Although vulvar carcinoma is a rare condition, there has been a notable rise in incidence of VIN in the recent years. Locally, there has been no established data on the incidence of VIN or its associated risk factors.

This retrospective descriptive study aims to determine the incidence of VIN and its associated risk factors in a tertiary government hospital.

The incidence of VIN was 1.6 per 100,000 women over the 12-year period reviewed in this study. Diagnosis was made based on biopsy results of an incidental finding of vulvar lesions upon physical examination. In our institution, the profile of a patient with VIN is a woman aged 40 years old and above, married, multigravid, nonsmoker and high school graduate. Other socioeconomic factors include unemployment. The vulvar lesions were multiple hyperpigmented papules located at the posterior labia majora. VIN was associated with abnormal colposcopic findings and 40% were associated with concomitant cervical disease. Treatment was a wide local excision.

Keywords: Vulvar intraepithelial neoplasia
The role of painfusor pumps in reducing length of stay in Patients Undergoing Laparotomy for Suspected or Confirmed Gynecologic Malignancy

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Introduction: The enhanced recovery program (ERP) was designed to improve patient outcome following major elective surgery by minimizing surgical stress and faster post-operative recovery. Benefits of a successful program will include a reduced length of stay (LOS), quicker return to normal activities and better patient experience. Our earlier audit on postoperative epidural use highlighted delayed conversion to oral analgesia and late mobilization resulting in increased LOS. The aim of this study was to evaluate the efficacy of post-operative painfusor pump and its influence on ERP.

Methods: Retrospective data collection conducted at a tertiary gynecologic oncology center. All women undergoing laparotomy for either suspected or confirmed gynecologic malignancy between November 2013 and July 2014 were identified. Data collected from their case notes, drug charts and painfusor data sheets.

Results: Twenty five consecutive patients underwent laparotomy. Their median age was 57 years (25-82 years). Median body mass index was 21-30 kg/m2. 60% (15/25) of the patients underwent surgery for confirmed or suspected adnexal malignancy, 24% (6/25) for corpus cancer and 16% (4/25) for other tumors and prophylactic surgery. Incision varied from lower midline to extended midlines and one pfannenstiels. Median blood loss was 500-999 ml. Postoperatively, 19 were admitted to intensive care unit, 4 and 2 were admitted to the acute dependency unit and to the ward, respectively. 96.7% tolerated oral fluids on day 1 post-operatively. The painfusors used were of 2 different doses and were removed on day 2 or day 3. The median LOS was 4 days (3-7 days). One patient had concerns regarding leaking from painfusor site and one had suspected infection which settled by prescription of antibiotics.

Conclusion: The painfusor pump was an attempt as part of the ERP to reduce LOS. This early data of painfusor pump use has been discussed with the anesthetic team and the practice is ongoing. We will present the final data on this new pain pump system.

Robotic surgery for cervical cancer – Results from a single institution

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Introduction: Surgery for cervical cancer plays a role only in early stage of disease and includes pelvic node dissection along with surgery for the central tumour. A robotics program for gynaecological cancers was started in our institution in 2010 and the experience on robotic surgical procedures cervical cancers is reported here.

Materials and Methods: Retrospective, observational study in Department of Gynaecological Oncology, Royal Surrey County Hospital, Guildford, UK with 2 surgeons in the years of 2011 and 2012. Patient demographics, intra and post-operative data were recorded. Smoking status was also ascertained at pre-operative assessment (POA). Completed care pathways of patient records were accessed to obtain data.

Results: A total of 202 Robotic surgeries were carried out in the department. Out of these 59 procedures were performed for women with a cervical lesion requiring surgical management. Median length of stay was 1 day. The age range of these patients varied from 23-75 with a median of 39. The BMI showed nearly 70% of women are at least obese. Operation times in minutes ranged from 107 - 295 with median of 158. The procedures performed included simple hysterectomy, radical hysterectomy and radical trachelectomy for treatment of the central disease as well as pelvic and para-aortic node dissection. Our centre adopted the ‘Dargent ‘ 2 stage technique’ for women with poor prognostic (high grade, LVSI) Stage 1B1 and patients with node positive disease were referred for chemo radiotherapy. Ovarian transposition was performed in 3 cases prior to chemo radiotherapy. All women undergoing radical hysterectomy and radical trachelectomy were discharged home with catheter and readmitted as a day case a week later for removal of catheter as a day case. Complications: First radical hysterectomy converted to open approach when persistent bleeding from the left parametrium and derangement of physiological parameters did not allow for Trendelenburg. Above patient required blood transfusion following blood loss of 1600mls.

Conclusion: Depending on patient characteristics (age, BMI, size of tumour) our previous experience included both open and laparoscopic surgery for cervical cancer management incorporating both the single stage coelio schuata as well as dargent's two stage approach. Based on our experience, robotic surgery for cervical cancer is a safe procedure and offers better outcomes. As with any new technique, there is a learning curve especially with the complex procedures. Long term survival and pregnancy outcomes are awaited.
3rd ASGO Workshop

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