

Conclusions ART is a reliable option as fertility sparing procedure. In selected cases, ART could be performed during pregnancy or after caesarean section with encouraging results.

EPV054/#283

DOES SURGICAL APPROACH INFLUENCE RECURRENCE IN EARLY STAGE CERVICAL CANCER WITH NO GROSS VISIBLE DISEASE AT PRESENTATION?

W Alduwaisan*, T Le, L Burgess. *University of Ottawa, Gynecologic Oncology, Ottawa, Canada*

10.1136/ijgc-2021-IGCS.122

Objectives Published results from the LACC trial reported inferior survivals after minimal invasive surgical (MIS) approach in the treatment of early cervical cancer. Spillage of gross tumours and peritoneal contamination had been proposed as possible explanations. We studied oncologic outcomes specifically in patients presenting with no clinical gross cervical cancer treated with minimal invasive versus open radical hysterectomy as this has not been reported.

Methods Retrospective chart reviews of all patients treated with radical surgery for cervical cancer from 2005 to 2018 were performed. Only patients with no gross visible tumour who were diagnosed after a LEEP/cone biopsies were included. Relevant demographics, pathologies and survival outcomes were abstracted. Descriptive and Chi Square statistics were used to summarize clinical variables. Kaplan Meier and Cox regression were used to study survival outcomes. All $p < 0.05$ were considered to be statistically significant.

Results 98 patients were included. Median age was 42. Median tumour size was 10 mm. Most was diagnosed after a cone biopsy (66%). Stage 1B1 was documented in 66% pre-operatively. MIS used in 20 patients. Uterine manipulator used in 14 cases. Median follow up was 42 months. One recurrence in MIS group (5%) vs six recurrence in laparotomy group (7.7%), $p = 0.67$. Three death in laparotomy and no death in MIS cohort. MIS is not significant in Cox model for PFS, adjusted for use of adjuvant radiation, and tumour size, $p = 0.43$.

Conclusions MIS radical hysterectomy might be safe in patients with no gross visible tumour at presentation.

EPV055/#292

THE HIGHER INCIDENCE OF CERVICAL CANCER AMONG HISPANICS IN THE US: WHAT FACTORS ARE RESPONSIBLE?

¹C-I Liao, ²E Thayer*, ³A Moon, ⁴D Wong, ⁵A Chan, ⁶A Milki, ⁴A Francoeur, ⁷J Chan. ¹Kaohsiung Veterans General Hospital, Obstetrics and Gynecology, Kaohsiung City, Taiwan; ²University of Massachusetts Medical School, Obstetrics and Gynecology, Worcester, USA; ³Stanford University School of Medicine, Obstetrics and Gynecology, Division of Gynecologic Oncology, Stanford, USA; ⁴University of California Los Angeles, Obstetrics and Gynecology, Los Angeles, USA; ⁵Palo Alto Medical Foundation Research Institute, Obstetrics and Gynecology, Palo Alto, USA; ⁶George Washington University School of Medicine and Health Sciences, Obstetrics and Gynecology, Washington DC, USA; ⁷California Pacific Medical Center, Obstetrics and Gynecology, San Francisco, USA

10.1136/ijgc-2021-IGCS.123

Objectives To evaluate differences in cervical cancer incidence, screening, and HPV vaccination between Hispanics and Whites in the United States.

Methods Data were obtained from the United States Cancer Statistics (USCS) from 2001 to 2017 and the Behavioral Risk Factor Surveillance System (BRFSS). SEER*Stat and Joinpoint regression program were used for statistical analyses.

Results Based on USCS data, in 2017 the overall incidence of cervical cancer was 7.5/100,000 in Hispanic women compared to 6.2/100,000 in White women. Hispanics aged 35 to 39 years had the highest incidence at 15.9/100,000. We then used BRFSS data to identify potential deficiencies in screening and prevention, and found that 11.6% of all Hispanics were never screened compared to only 5.1% of Whites. When stratified by age, Hispanics 25 to 29 years old had the highest rate of absent screening at 11.2%, compared to 6.4% of Whites of the same age. In examining adherence to screening guidelines, we found that 11.4% of Hispanics and 26.6% of Whites were non-adherent (no screening in the last five or more years). Furthermore, of those eligible for HPV vaccination in 2006, only 37.3% of Hispanics had received the vaccine by 2017, compared to 50.0% of Whites.

Conclusions Cervical cancer incidence is 20% higher in Hispanics compared to Whites in the United States. Poor compliance with cervical cancer screening and lower vaccination rates may explain this disparity.

EPV056/#293

HIGH INCIDENCES OF CERVICAL CANCER IN US BLACK WOMEN OVER AGE 65 – SHOULD INDIVIDUALIZED SCREENING GUIDELINES BE CONSIDERED?

¹C-I Liao, ²E Thayer*, ³A Moon, ⁴D Wong, ⁵A Chan, ⁶A Milki, ⁴A Francoeur, ⁷J Chan. ¹Kaohsiung Veterans General Hospital, Obstetrics and Gynecology, Kaohsiung City, Taiwan; ²University of Massachusetts Medical School, Obstetrics and Gynecology, Worcester, USA; ³Stanford University School of Medicine, Obstetrics and Gynecology, Division of Gynecologic Oncology, Stanford, USA; ⁴University of California Los Angeles, Obstetrics and Gynecology, Los Angeles, USA; ⁵Palo Alto Medical Foundation Research Institute, Obstetrics and Gynecology, Palo Alto, USA; ⁶George Washington University School of Medicine and Health Sciences, Obstetrics and Gynecology, Washington DC, USA; ⁷California Pacific Medical Center, Obstetrics and Gynecology, San Francisco, USA

10.1136/ijgc-2021-IGCS.124

Objectives In 2003 the USPSTF recommended discontinuing cervical cancer screening at age 65 in low risk adequately screened women. We aim to evaluate trends in cervical cancer incidence and screening in United States Black and White women over age 65.

Methods Data were obtained from United States Cancer Statistics (USCS) from 2001 to 2017 and from the Behavioral Risk Factor Surveillance System (BRFSS). SEER*Stat and Joinpoint regression program were used for statistical analyses.

Results Using USCS data, we evaluated differences in cervical cancer incidence by race and age. We found the highest incidence in Blacks aged 65 to 69 years at 17.6/100,000, compared to 15.0/100,000 in Whites aged 40–44 years. of note, the incidence among Blacks over age 69 remained high at 13.9–17.5/100,000 whereas the incidence in Whites decreased steadily after peaking in 40–44 year-olds. Using BRFSS data, we evaluated patterns in screening, and demonstrated that 34.7% of Blacks aged 65 and older had never been screened compared to 21.5% of Whites. of those screened, 19.8% of Blacks aged 65–69 years were non-adherent to guidelines (no Pap in five or more years) and the rate of non-compliance increased 5.2% per year over our study period ($p < 0.001$).

Conclusions Over one third of Blacks aged 65 and older never underwent cervical cancer screening, and the rate of non-compliant screening is increasing. With the highest incidence of cervical cancer in Blacks seen in this age group, the role of individualized cervical cancer screening guidelines should be considered.

EPV057/#294

DEVELOPMENT OF A LARGE SWINE MODEL FOR ANATOMICAL AND FUNCTIONAL ASSESSMENT OF THE FEMALE PELVIC AUTONOMIC NERVES IN WOMEN

¹J Mun, ¹J Kim, ²S Lee, ¹HS Kim, ¹J-W Kim. ¹Seoul National University College of Medicine, Department of Obstetrics and Gynecology, Seoul, Korea, Republic of; ²Keimyung University School of Medicine, Department of Obstetrics and Gynecology, Seoul, Korea, Republic of

10.1136/ijgc-2021-IGCS.125

Objectives The anatomy and function of the pelvic autonomic nerves are not yet fully understood despite the development of nerve-sparing radical surgery for cervical cancer. Thus, we developed a female animal model for anatomical and functional assessment of the pelvic autonomic nerves in women.

Methods We used eight female swine models weighing about 30 kg each and assessed the anatomy of their pelvic autonomic nerves. We also evaluated the nerves' function by measuring the pressure of the bladder, vagina, and rectum after electrically stimulating the parasympathetic nerves with or without resection of the sympathetic nerves.

Results Three swine models were dissected for anatomical assessment and showed similar patterns. Although there were some anatomic variations, most showed identical pathways of the sympathetic and parasympathetic nerves that eventually led to the formation of superior and inferior hypogastric nerves respectively, as well as the individual branches of the pelvic plexus. The remaining eight models were used for functional assessment. Before resection of the sympathetic nerves, stimulation of parasympathetic nerves showed increased interval to contraction and duration of contraction but decreased maximal contractile pressure and frequency in the pelvic organs, while results revealed the contrary after resection of the sympathetic nerves.

Conclusions We were able to identify the anatomy and function of pelvic autonomic nerves in swine models and found them to be similar to those of women. Further studies should be done to compare the two in order to master the knowledge of female pelvic autonomic nerves.

EPV058/#315

ASSOCIATION OF HLA-G POLYMORPHISMS WITH HIGH-RISK HPV+ CERVICAL PATHOLOGIES SUSCEPTIBILITY

¹I Zidi, ^{1,2}Zemni*, ¹K Tizaoui, ¹HI Ouzari, ^{1,3}N Boujelbene. ¹Sciences Faculty of Tunis, University of Tunis El Manar, Laboratory of Microorganismes and Active Biomolecules, Tunis, Tunisia; ²Salah Azaiez Institute of Cancerology, University of Tunis El Manar, Department of Surgical Oncology, Tunis, Tunisia; ³Salah Azaiez Institute of Cancerology, University of Tunis El Manar, Department of Pathology, Tunis, Tunisia

10.1136/ijgc-2021-IGCS.126

Objectives HLA-G gene polymorphisms have been linked to many cancers particularly to cervical squamous cell carcinoma (CSCC). In this meta-analysis, we studied the association of

HLA-G +3142 C/G and 14bp Insertion/deletion (Ins/Del) polymorphisms with cervical pathologies susceptibility.

Methods A comprehensive systematic literature search in Medline, Pubmed, Cochrane, Embase, and Web of Science databases was performed to look up relevant studies. We identified four studies for HLA-G +3142 C/G (299 patients with HPV+ high-risk cervical pathologies and 870 healthy controls (HC)); and six studies for HLA-G14bp Ins/Del (693 patients with HPV+ high-risk cervical pathologies and 2536 HC). The association was studied through the calculation of the odds ratio (OR) and the corresponding 95% confidence interval (CI).

Results HLA-G +3142 C/G polymorphism and HLA-G 14 bp Ins/Del significantly enhanced the risk for HPV+ cervical pathologies only in Asians conversely to overall population and Caucasians. HLA-G +3142 C/G enhanced the HPV+ high-risk cervical pathologies risk under allelic C vs. G model (OR=1.321, 95CI%=1.035–1.686, p=0.025) and under the genotypic model CC vs. GG+GC (OR=2.028, 95CI%=1.337–3.075, p=0.001). HLA-G 14bp Ins/Del increased also the HPV+ cervical pathologies risk only under the genetic model (InsIns vs. DelDel+InsDel) (OR=1.910, 95%CI=1.151–3.171, p=0.012) in Asians.

Conclusions Our preliminary meta-analysis showed a significant association of HLA-G +3142 C/G polymorphism and HLA-G 14bp Ins/Del with HPV+ high-risk cervical pathologies susceptibility in Asians. Further studies still needed in other ethnicities to clearly establish our findings.

EPV059/#324

INTERACTIVE FLASHCARDS IMPROVE HUMAN PAPILOMAVIRUS VACCINE KNOWLEDGE AND WILLINGNESS TO RECOMMEND AMONG NURSES

¹SOA Leung*, ²E Duffey-Lind, ³K Welch, ¹S Feldman. ¹Brigham and Women's Hospital, Obstetrics and Gynecology, Boston, USA; ²Dana Farber Cancer Institute, Pediatric Oncology, Boston, USA; ³Team Maureen, Team Maureen, North Falmouth, USA

10.1136/ijgc-2021-IGCS.127

Objectives The Human Papillomavirus (HPV) vaccine prevents cervical and other HPV-associated cancers by preventing infection with oncogenic HPV subtypes. In the United States, only 57% of women and 53% of men in the recommended age groups have received all recommended doses. Our objective was to create a 7-minute interactive learning platform to improve knowledge of HPV and to assess willingness to recommend the vaccine among nurses.

Methods Pre- and post-intervention questions on HPV-associated cancers, vaccine eligible groups, dosing schedules, adverse events, and willingness to recommend the vaccine were posed. The intervention consisted of 10 flashcards in a question-answer format with up-to-date information and responses to frequently asked questions (e.g., Who should receive the vaccine and how is it given? Some parents may worry that their child will think that getting this vaccine makes it OK to have sex, how do I answer?).

Results All 113 participants (40.9±11.6 years-old, 58% with >10 years in practice) identified cervical cancer as an HPV-associated cancer. Post-intervention, there was improvement in recognition of other HPV-associated cancers (70% to 94%) and knowledge of dosing schedule (46% to 93%). 7% versus 1.7% of participants agreed with unproven adverse events pre- and post-intervention. 94% of participants strongly agreed that they would recommend the HPV vaccine to patients and