

training seeking greater exchange of ideas in best practices. In 2018, 8 sites held 47 total Project ECHO sessions. Verbal and written feedback has been highly positive.

**Conclusions** Remote telementoring through Project ECHO videoconferences is feasible and acceptable, and highly valued by participants, across widely disparate settings.

## IGCS19-0297

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### CHALLENGES AND OPPORTUNITIES IN THE INTEGRATION OF PATHOLOGY CONSULTATION INTO THE IGCS PROJECT ECHO GLOBAL TELEMENTORING PROGRAM

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**Objectives** The Extension for Community Healthcare Outcomes (ECHO) is a proven model to improve specialty care for underserved communities. The IGCS uses the Project ECHO platform to connect multi-disciplinary teams across disparate regions, through virtual tumor board case discussions and didactic presentations. In the Project ECHO sessions, international pathologists provide pathology review, which is often based on limited imaging embedded in Power Point slide presentations. We present an initial review of our experience integrating pathologists into the IGCS virtual tumor boards.

**Methods** We solicited feedback from pathologists and clinicians participating in the IGCS ECHO sessions in individual and small group settings.

**Results** Clinicians appreciate the inclusion of pathology images and teaching in ECHO sessions with good clinical and educational value. However, challenges were noted with engagement and scheduling with in-country pathologists. Challenges noted by the consulting pathologists included: being asked to offer an opinion with limited information or images, poor quality images, lack of the final pathology report, coping with apparent diagnostic errors, lacking an established relationship with the local pathologist, and the local pathologist not always being present to discuss or explain findings. Opportunities identified include: establishing telepathology connections to facilitate case review, leveraging the IGCS Global Curriculum international mentor/local mentor/trainee model to create parallel and synergistic international and local pathologist collaborative relationships beyond ECHO sessions, further program strengthening through international exchange trips for international and local pathologists.

**Conclusions** Inclusion of pathology experts in Project ECHO sessions is key to successful tumor boards. Addressing the above-noted challenges will strengthen the entire collaboration.

## Gynecologic Pathology – Cytology and Disease

### IGCS19-0114

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### ENDOMETRIAL HYPERPLASTIC PROCESSES: CORRELATION BETWEEN PROLIFERATION AND CELL APOPTOSIS

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**Objectives** The investigation of proliferation markers expression Ki67 and apoptosis p53, bcl-2 in endometrial hyperplastic processes (EHP).

**Methods** Data of 66 women endometrial tissue samples (mean age 47,3±4,5 years) were investigated: 52 with EHP and 14 healthy biphasic. According to proliferative processes differentiation 5 groups were obtained: I - simple hyperplasia without atypical cells-11 women; II - complex hyperplasia without atypical cells-18; III - simple hyperplasia with atypical cells-10; IV - complex hyperplasia with atypical cells -13 patients; V - control group morphologically unchanged endometrium-14. Immune histochemical reactions with antibodies to Ki67, bcl-2, p53 (DAKO-Germany) were used.

**Results** Ki67 expression was increased along with hyperplastic process progression: relatively low proliferative activity was in I group both in epithelial and stromal cells (6,34±1,31% and 1,05±0,43% respectively). In II, III and IV groups proliferative activity was raising. Ki67 expression in EHP was extremely focal. p53 expression was absent in I and V group, appeared in II group (8,35±1,34% and 2,34±1,09%) with maximum in IV group (56,6±4,08% and 27,94±2,31%) in both epithelial and stromal cells respectively. bcl-2 witnessed expression changes: EPH type and stage according to color distribution and intensity from group II (5,6% strong staining(+++), 16,7% - moderate(++), 50,0% - weak(+), staining absence - 27,7% - (0)) to IV (26,7% - strong(+++), 40,0% - moderate(++), 13,3% - weak(+), 20,0% - absence(0)).

**Conclusions** In EHP the immune histochemical markers according to morphological changes sequence were observed. Mitotic activity increase is going along with apoptosis activation. Cells' death programmed processes disorders could be oncological prognosis predictors at EHP.

## IGCS19-0260

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### THE ROLE OF CHRONIC RECURRENT BACTERIAL VAGINOSIS IN THE CERVICAL PRECANCER PROGRESSION AND DEVELOPMENT

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**Objectives** Our goal was to study bacterial vaginosis influence on cervical precancer diseases progress prognosis.

**Methods** During our research, we examined 100 sexually active women 25–35 years old ( $29.1 \pm 1.25$ ) with precancer cervical lesions and chronic recurrent bacterial vaginosis who were separated in two groups according to cervical human papillomavirus (HPV) infection presence. We used liquid PAPP test, PCR, tissue biopsy histology, proliferation cells proteins lab tests.

**Results** 50 women of group I with 100% HPV highly oncogenic types showed: PAP test – ASCUS – 36 women (72%), LSIL – 7(14%), HSIL – 7(14%); HPV of 16–18 types – 39 women (78%); the histology verified HSIL – in all 50 women (100%), of which CIN II – 21(42%), CIN II-III – 22(44%), CIN III – 18 patients (36%); p16 protein was determined in specimens of 36 women (72%), Ki-67 protein – in 23 samples (46%). From group II of 50 women with HPV absence we revealed: NILM – in 10 women (20%), ASCUS – in 24(48%), LSIL – in 16 patients (32%); the histology showed parakeratosis, acanthosis – in 34 patients (68%), LSIL (CINI) – in 16 samples (32%).

**Conclusions** Chronic recurrent bacterial vaginosis leads to the toxic nitrosamines release, which causes the epithelial cells neogenesis generation, leads to cellular immunity decrease and favorable conditions for the HPV more advanced stage of CIN II-III development. p16 and Ki-67 proteins determine the dysplasia genesis and disease prognosis. We consider that chronic recurrent bacterial vaginosis timely treatment is obligatory in precancer cervix uterine diseases progression prevention.

## IGCS19-0277

### 251 POST-COITAL BLEEDING AND YOUNGER AGE ARE RISK FACTORS FOR HIGH-GRADE DYSPLASIA IN WOMEN WITH BIOPSY PROVEN LOW-GRADE SQUAMOUS INTRAEPITHELIAL LESIONS

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**Objectives** Biopsy proven newly diagnosed Low-grade Squamous Intraepithelial lesions(LGSIL), are considered reversible lesions and as such are usually treated conservatively with follow-up or ablation. In this study we aimed to evaluate the outcome of women with LGSIL who underwent surgical conization, and assess risk factors for higher risk disease.

**Methods** We performed a retrospective study of all patients who underwent surgical conization for LGSIL disease, in one university affiliated medical center (2012–2017). Study group was defined as patients who had their histological classification upgraded, and control group as patients who were either downgraded or diagnosis remained. Demographics, histological outcome and indications were compared between groups.

**Results** Overall, 111 patients met inclusion criteria of whom 44(39%) were histologically upgraded, 1 patient was found

to have Adenocarcinoma of the cervix. Upgraded women were younger (34y vs 44y,  $p < 0.001$ ), and of lower parity (1.2 vs 2.4,  $p < 0.001$ ). There was no difference between groups as to BMI and smoking. The histologically upgraded women had higher rates of antecedent LSIL Pap smear (35% vs 15%,  $p < 0.001$ ), and higher rate of post-coital bleeding (PCB) as indication for conization (50% vs 23%,  $p = 0.02$ ). Using a logistic regression model adjusting for age, indication and possible confounders, increased age was found to be a protective factor (aOR=0.9 95% CI 0.84 – 0.97), while PCB was a predicting factor for upgrading (aOR=1.1 95% CI 1.003 – 1.195).

**Conclusions** Contrary to common practice, in this study, younger women with a biopsy diagnosis of LSIL, should be evaluated for high risk disease especially if they report PCB.

## IGCS19-0253

### 252 COMPARISON OF TWO ULTRA-STAGING PROTOCOLS FOR THE DETECTION OF LYMPH NODE METASTASES IN EARLY STAGE CERVICAL AND ENDOMETRIAL CANCER

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**Objectives** Ultra-staging (US) of sentinel lymph nodes (SLN) increases the detection of nodal metastases. US protocols vary among gynecologic pathologists, and internationally accepted guidelines are still not available. This study compares two US protocols (US-A vs US-B) in early stage cervical (CC) and endometrial cancers (EC) (table 1).

**Methods** We retrospectively evaluated patients with clinical stage I endometrial cancer (EC) or stage IA-IB1 cervical cancer (CC) who underwent primary surgery with SLN biopsy from November 2010 to October 2017.

**Results** 229 patients were analyzed (161 ECs and 68 CCs). The rate of positive node disease was: 22% with US-A protocol and 12% with US-B protocol ( $p = 0.09$ ) for EC patients; 22% and 10% ( $p = 0.18$ ) for CC patients. Macrometastasis, micrometastases, and ITC were 31%, 61% and 8%, respectively with US-A protocol; 43%, 40% and 17%, respectively with US-B protocol ( $p = 0.272$ ). Mean size of nodal metastasis was  $5.4 \pm 6.3$  mm for US-A and  $3.2 \pm 4.3$  mm for US-B protocol ( $p = 0.09$ ). On multivariate analysis including grade and LVSI, the US method was not associated with the detection of nodal metastases.

**Conclusions** Approximately 50% of the nodal metastases detected by US of SLNs were low-volume metastases. In this study, the detection of positive node disease was not associated with the type of US protocol used. Larger multicenter prospective studies are advisable to confirm these results.