may be safe and preferable in early stage IMT patients who underwent complete resection of tumor.

AS16. Screening/Early detection

**COMPREHENSIVE SERUM GLYCOPEPTIDE SPECTRA ANALYSIS (CSGSA) TO IDENTIFY EARLY-STAGE OVARIAN CANCER**

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Introduction Ovarian cancer is the most fatal of all female reproductive cancers, thus a new reliable and accurate screening test for ovarian cancer is urgently demanded. We established a think-outside-the-box screening method that combines cancer-related tumor markers and comprehensive glycan alterations in serum glycoproteins, which represent a physical state (CSGSA: comprehensive serum glycopeptide spectra analysis). We aimed to verify the diagnostic capability of CSGSA, a blood test to identify early-stage epithelial ovarian cancer (EOC) in this study.

Methods We obtained sera of 564 EOC patients (55.8 ± 12.2 years) and 1,154 non-EOC controls (54.1 ± 12.0 years) from 13 facilities. Expression patterns of 1,712 glycopeptides detected by liquid chromatography mass spectrometry (LC-MS) and cancer-related tumor markers were analyzed by convolutional neural network (CNN) to discriminate an early-stage EOC.

Results CSGSA CNN model discriminated early-stage EOC (Stage I) from non-EOC controls with ROC-AUC 0.929 (95% CI: 0.919–0.940), which exceeded those of current tumor markers, CA125 (0.840, 95% CI: 0.811–0.870) and HE4 (0.718, 95% CI: 0.675–0.760). Positive predictive value (PPV) correlated by the prevalence became 7.1% where EOC sensitivity was 51.7%.
Conclusion/Implications We confirmed that the CSGSA discriminated early-stage EOC with high sensitivity and specificity. It is expected to identify early-stage EOC in asymptomatic women before EOC develops to advanced stage.

PR085/#158 PREDICTORS OF LIFETIME CERVICAL CANCER SCREENING AND ASSOCIATION WITH SOCIAL DETERMINANTS OF HEALTH: CROSS-SECTIONAL EVIDENCE FROM THE CANADIAN LONGITUDINAL STUDY ON AGING

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10.1136/ijgc-2023-IGCS.121

Introduction Cervical cancer screening has resulted in a decrease in the occurrence of and death from cervical cancer. The Canadian Longitudinal Study on Aging (CLSA) prospectively collected health outcomes on >50,000 individuals. We sought to identify the prevalence of Canadian female participants having never undergone cervical cancer screening and the association with social determinants of health.

Methods We performed a cross-sectional analysis from CLSA data. The main outcome was self-report of ever having undergone a pap test. Regression analyses, controlling for the complexity of the design and covariates, evaluated the association between self-reported lifetime cervical cancer screening and social determinants of health.

Results The population-based sample comprised 22,910 participants aged 45–85, of whom 99.8% had available information on cervical cancer screening (n=22,720). The prevalence of never having undergone a pap was 14.1%; weighted prevalence, 11.8% (95%CI 11.0–12.6). Older age (10-year) (OR 1.5, 95%CI 1.4–1.6), lower education (low vs. high) (OR 1.5, 95%CI 1.2–1.9) and low household income (low vs. high) (OR 1.7, 95% CI 1.3–2.3) were associated with absence of lifetime screening. Having a religious affiliation (OR 1.3, 95%CI 1.1–1.5) and never being married/lived in common-law (OR 1.5, 95%CI 1.2–1.9) were also associated with never having undergone screening. Notably, not having a family physician was an important contributing factor (OR 2.3, 95%CI 1.6–3.3). However, of participants who never underwent a pap test, 97% reported having a family physician.

Conclusion/Implications Our analysis highlights inequities in access to cervical cancer screening in the Canadian context. This data can help inform targeted education and empowerment strategies to increase cancer screening uptake.

PR086/#488 CAN HPV SELF SAMPLING BE USED FOR CERVICAL CANCER SCREENING IN INDIA?

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10.1136/ijgc-2023-IGCS.122

Introduction Evidence from high income countries supports HPV-self sampling (HPV-SS) for improving cervical cancer screening coverage. Success of HPV-Self sampling (HPV-SS) in resource constrained countries like India with diverse population, will depend on developing impactful health education material, generating awareness towards cervical cancer and HPV-SS and on precision in performing test by beneficiaries. The current study was undertaken with objectives to determine knowledge, attitudes and practices (KAP), acceptability, barriers, agreement rates and prevalence of HPV in different population subgroups using varied methods of communication.

Methods The current study enrolled 1600 women in age group of 30–55 yrs, from urban slums (500), urban non-slums (500) and rural (600) settings in Maharashtra, India. Information regarding cervical cancer and steps for collecting self sample was explained by two modalities: health education by trained health personnel in health education arm and through printed pictorial depiction in the pamphlet arm. One sample for HPV testing was collected by health personnel for each participant in both arms.

Results Overall prevalence of HPV was 7.8% with no significant differences across the settings. Overall acceptance of HPV-SS was 98.4%. Awareness regarding cervical cancer and HPV-SS was similar across settings and modalities of education. The overall concordance rates between HPV-SS and health personnel collected sample was 94.8% (k=0.508, CI=0.458–0.559, p<0.001) and was similar across settings. Compliance for clinical assessment of screen positive women and for treatment was 76.8% and 80% respectively.

Conclusion/Implications The study demonstrated that HPV-SS is acceptable, feasible and implementable in India and will assist in improving cervical cancer screening coverage.

PR087/#201 PREVALENCE OF HIGH-RISK HPV DNA IN A SEMI-URBAN POPULATION OF UTTARAKHAND, INDIA USING A POINT-OF-CARE TEST

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10.1136/ijgc-2023-IGCS.123

Introduction WHO recommends a framework shift from screening with cytology and visual inspection methods, to detection of HPV DNA as the primary screening test and, endorses vaginal self-sampling as method of collection. This study was planned with the objective to determine the prevalence of HR-HPV 16/31 & 18/45 in vaginal samples using a real-time micro-PCR analyzer and to study the acceptability of self-sampling.

Methods Micro-PCR test (Truenat®) was used on vaginal samples collected by self-sampling for detection of HR-HPV infections 16/31,18/45. A sample size of 975 women was calculated with 95% confidence, 20% relative precision and adjusting for 10% non-responder rate. Samples were collected in the community during Covid-19 pandemic. Prevalence of HR-HPV 16,18 was determined separately by RT-PCR using HPV-Q Real-time PCR kit (genes2me).

Results Of 975 eligible women screened, prevalence was 4.6% with 45 women testing positive for HR-HPV (16/31,18/45). Of these 60% were confirmed positive for HR-HPV 16 & 18 by RT-PCR. Of the 45 positive women, 22(48.9%) underwent colposcopy and treated accordingly while the rest declined...