done on immunohistochemistry to improve screening of cervical intraepithelial neoplasia (CIN) as precancerous lesion. But, majority of the studies are based on cytological samples.

The objective of this study was to analyze the correlation KI-67 biomarker and HPV infection in predict short time prognosis in CIN as an alternative or auxiliary method to current screening method in a different geographic population.

Methodology This descriptive cohort prospective study included 40 patients with diagnosis of CIN based on cervical punch biopsy samples after colposcopy examination. They were referred to the department of gynecology and oncology of an academic hospital, Mashhad University of 2016 to 2017. All samples were investigated for HR- HPV DNA with Cobas test and immunostaining for KI-67 biomarker. Finally, after one year follow up, prognosis for all patients was evaluated. Data were analyzed by SPSS software program version 23.0 and Mann-Whitney U test and Fisher's exact test. P-value <0.05 was considered significant.

Results Significant difference was found between HR-HPV positive and negative tests in KI-67 expression ($P<0.001$), but no significant difference was observed in reactivity level ($P=0.5$), also no significant difference was found in KI-67 expression in metaplastic and non-metaplastic epithelium ($P=0.88$).

Conclusion KI-67 biomarker is recommended as complementary screening tests not alternative for differentiating in high risks patients with CIN1. The patients with low KI-67/HR-HPV positive could be offer for a less aggressive follow-up protocol.

Disclosure Nothing to disclose.

EP369 AN EVALUATION OF SMI AND SWE UTILITY IN THE IDENTIFICATION OF THE UTERINE CERVICAL LESION

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Introduction/Background The purpose of the study is to determine if superb microvascular imaging (SMI) and shear wave elastography (SWE) can be used for the early diagnosis of uterine cervical intraepithelial neoplasia and cancer.

Methodology A case-control study was carried out in St. Marianna University School of Medicine Hospital between April 2017 and January 2018 on patients with uterine cervical dysplasia and uterine cervical cancer. Seventeen controls with eight subjects were investigated. An evaluation using SMI and SWE was conducted in addition to the conventional ultrasonic tomography and color doppler tests before or after the treatment. The colored races plastic intensity in the SMI was evaluated for three phases, strong, mediate, weak, and the blood flow rate was measured. The SWE was measured at several locations and the mean value was used as signal intensity.

Results The target breakdown was one patient with uterine cervical cancer and seven patients with high-grade squamous intraepithelial lesions. For the subject and control cases, the intensity of the conventional colored races plastic was 6% vs. 0% (n.s.), and 94% vs. 100% for strong and weak phase, respectively. While for the control the measure, it was 39% vs. 0% and 61% vs. 100% for strong and weak phase, respectively. In addition, one patient with uterine cervical cancer exhibited a strong phase. The SWE evaluation of the uterine cervical hardness resulted in SWE level of 4.4 ± 1.2, 2.2 ± 0.3 for case and control, respectively ($p<0.01$).

Conclusion An evaluation using SMI and SWE utility suggested the identification of histologic changes such as minute vascular hyperplasia or malignant transformation of the uterine cervical lesion.

Disclosure Nothing to disclose.

EP370 THE EFFICACY OF HYSTERECTOMY FOR LOCAL REMNANT OR RECURRENT CERVICAL CANCER AFTER RADICAL RADIOTHERAPY

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Introduction/Background Radiation therapy is an effective treatment for cervical cancer (CC), but remains at a constant rate, and those cases have a poor prognosis. The purpose of this study was to examine the efficacy of adjuvant hysterectomy in local remnant or recurrent (LR) cases of CC after radical radiotherapy (RT).

Methodology Between May 2007 and September 2018, 21 patients who underwent hysterectomy for LR CC after RT in our department were included in this study. We retrospectively reviewed their medical records for patient background, clinicopathological factors, complications and prognosis. LR CC was determined based on histopathological and imaging examinations 3 months after the end of treatment. We classified surgical specimens according to the treatment effect (effects 0–3) using histological effect criteria. In addition, we used the Kaplan-Meier and log-rank test for statistical analyses.

Results The median patient age was 55 years, and the FIGO stages were IB2, IIB and IIIB in 11, 8 and 2 cases, respectively. Based on the histological type, there were 14 cases of squamous cell carcinoma and 7 of adenocarcinoma. Tumour markers (TM) were re-elevated in five cases. Perioperative complications included intraoperative bladder injury and postoperative pelvic abscess in two cases. The median observation period was 39 months, and there were 10 recurrences. The median progression-free survival (PFS) was 54 months, and the 3-year overall survival (OS) rate was 61.1%. With regard to prognostic factors, the treatment effect (effect 1 vs. effect 2/3) was significantly associated with PFS ($p=0.008$) and OS ($p=0.023$) and the re-elevation of TM was significantly associated with PFS ($p=0.017$).

Conclusion Hysterectomy for LR CC after RT might be a tolerable treatment with a long-term prognosis. Histological treatment effect evaluation of surgical specimens might be useful in additional treatment assessment, and TM elevation might be useful in preoperative assessment.

Disclosure Nothing to disclose.

EP371 NON-BRACHYTHERAPY APPROACH TO TREATMENT OF LOCALLY ADVANCED CERVICAL CANCER

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Introduction/Background Concomitant chemoradiation therapy (CRT) that includes both external beam radiotherapy (EBRT) and brachytherapy (BT) is the current standard of care in treatment of locally advanced cervical cancer (LACC). Volumetric Modulated Arc technology provides potential benefits allowing for dose escalation and decreased toxicities. This non-BT approach offers improved accuracy and no geographical miss due to adaptive radiotherapy, but oncologic outcomes still need to be evaluated.
Methodology Patients with LACC (stages 1B3-IVA) who underwent CRT using EBRT and simultaneous integrated boost at our institution were evaluated prospectively from May 2015 till April 2019. All were initially evaluated by a gynecologic oncologist then with MRI and 18FDG-PET/CT. Histology was confirmed by an expert pathologist. Interval CT were performed during treatment, pelvic exams with cytology every 3 months and PET/CT at 3 and 12 months after completion of treatment. Oncologic outcomes and toxicities were assessed.
Results 21 patients were analyzed: median age was 54 years (30–76), 19 patients had squamous cell histology, 2 had adenocarcinoma. Median follow-up was 26 months (3–44), average dose to the gross tumor volume was 90.2 Gy (79.5–96.6), 79.8 Gy to all PET/MRI positive nodes (63.0–89.7) and 56.3 Gy (45–67.6) to all elective nodes. No patents received BT, all but three received chemotherapy. 3-year local control was 100%, PFS 90.4% and OS 100%. There were only two recurrences: a skull lesion 18 months following CRT in a patient with mesonephric adenocarcinoma and a transposed ovary metastases 15 months after CRT in the other. No grade III–IV toxicities seen, only one patient (4.7%) had late rectal grade II toxicity.
Conclusion Non-brachytherapy CRT for LACC is feasible. It allows for a significant dose escalation thus provides better local control and likely increases PFS and OS at no risk of serious toxicity. Randomised studies comparing this approach to the current standard of care are needed.
Disclosure Nothing to disclose.

EP372 DOVIA AND TELEDOVIA AS A DOCUMENTATION AND CONSULTATION MEDIA IN VIA METHODS OF CERVICAL CANCER SCREENING IN INDONESIA

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Introduction/Background In an effort to overcome cervical cancer, Visual Inspections with Acetic Acid (VIA) is very important as a screening methode but there is no an adequate documentation that can be used for consultation or discussion among medical practitioners. For this reason, our team jointly developed a method of documentation VIA (Documentation of Visual Inspection with Acetic Acid (DoVIA)) which uses cellphone's camera to take pictures of the cervix and Portal Telemedicine of DoVIA (TeleDoVIA), which is a model of photography-based consultation that utilizes telecommunication systems through the Whatsapp Messenger feature.

This study aims to assess the use, understanding and satisfaction of the TeleDoVIA Portal as a medium of communication, consultation, and discussion of DoVIA results and the distribution of user.

Methodology Through a descriptive design, datas are analyzed univariate. The research population is medical practitioners who utilize the TeleDoVIA Portal. In the study period, 82 medical practitioners with 177 DoVIA results were in the form of photographs.
Results Medical practitioners who use the TeleDoVIA Portal are scattered throughout Indonesia starting from the western region (Aceh Province) to the eastern (West Papua Province). 72% work as midwives, and 92.75% work in Puskesmas. About 47.6% stated that they sent DoVIA because they wanted to confirm the diagnosis they had made. They claimed that 100% understand and 100% satisfied with the explanation given by the consultant. The sharpness of cervical photographic images is said to be sharp at 89.27%, only by 10.73% photos that are not sharp enough. A total of 56.5% of diagnoses established by consultants are negative VIA and the suitability diagnosis established by medical practitioners compared to diagnosis by consultants reaches 88.1%.
Conclusion The TeleDoVIA portal is considered to be quite effective as a medium of communication, consultation, discussion and assistance to medical practitioners who have already attended VIA cervical cancer screening training.
Disclosure Nothing to disclose.

EP373 HUMANISTIC BURDEN ASSOCIATED WITH CERVICAL CANCER: AN ANALYSIS OF PATIENT-REPORTED OUTCOMES IN THE EUROPEAN UNION FIVE (FRANCE, GERMANY, ITALY, SPAIN, AND UNITED KINGDOM)

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Introduction/Background Although much is known about the prevention, screening, and treatment of cervical cancer (CC), less is known about its humanistic burden. This study compared patient-reported outcomes (PROs) between women diagnosed and treated for CC, women diagnosed and untreated for CC, and women without CC.
Methodology Data were aggregated from the 2010, 2011, and 2013 EU5 National Health and Wellness Survey, a nationally-representative, self-administered, internet-based survey of adults (N=177,317). Controlling for baseline patient demographics and characteristics, three matched cohorts were compared in multivariable analysis: treated CC, untreated CC, and no CC. Respondents with other forms of cancer were excluded from analyses. Outcomes included Mental Component Summary (MCS) score, Physical Component Summary (PCS) score, and SF-6D Utility score from the Medical Outcomes Study 12-Item Version 2 Short Form Survey Instrument (SF-12v2). Suicidal ideation and depression were assessed via the Patient-Health Questionnaire 9-Item (PHQ-9).
Results Adjusted means are reported. Treated CC (N=113), untreated CC (N=646), and no CC (N=759) largely differed by PCS score (44.46 vs. 45.79 vs. 47.28, p's<0.01) and SF-6D Utility score (0.65 vs. 0.67 vs. 0.69, p's<0.01), though the difference between treated CC and untreated CC was not significant. MCS score did not differ by cohort (figure 1). Untreated CC reported more depression than no CC, in terms of PHQ-9 score (6.99 vs. 5.82, p<0.05). PHQ-9 score did not differ by any other cohorts (figure 2). Treated CC was