Results Prophylactic laparoscopic adnexectomy was performed on 44 patients (average age - 49.4 years). Cancer was accidentally detected in 3 patients (6.5%). RRSO at the age of 60 (only one with Ca 125 increased to 69U/ml, fallopian tube cancer, RRSO at the age of 65 and RRS patient aged 48 - borderline tumour. No cancer was detected in any of the 28 patients including those with cancer during prior pelvic MRI. Most of the patients (26) performed prophylactic adnexectomy after breast cancer. Average age of procedure for both groups was 49.4. Average age of genetic tests in those patients was 45 (whole group - 43.6 years) and average cancer development was 42.4. Two out of 18 patients without family history developed breast cancer after RRSO at ages 40 and 48. None of the patients had STIC (serous tubal intraepithelial carcinoma). One patient had a conversion to laparotomy due to bleeding, which sets complication rate at 2.2%.

Conclusion The recommended age for RRSO is 35–40 years of age. Later, there is a greater risk of developing ovarian cancer confirmed by our analysis. MR and Ca 125 of the pelvis performed before surgery did not increase cancer detection sensitivity. We need standardized evaluation criteria pre-operatively to determine the risk of incidental cancer. Selection is necessary for young patients who have indications for genetic testing which makes prophylactic adnexectomy possible to be performed before the age of 40. RRSO rarely carries risk of complications (0.22–4%) – which was confirmed in our analysis.

Disclosures We have no potential conflict of interest to report.

Prevalence, Genotype Distribution and Risk Factors for Cervical Human Papillomavirus Infection in Ariana (Tunisia)

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Introduction/Background Certain human papillomavirus (HPV) genotypes, particularly types 16 and 18, are implicated in the genesis of cervical cancer, one of the most common cancers in young women. Two preventive vaccines against HPV have been introduced for primary prevention. To study the interest in the integration of this vaccine in the Tunisian vaccination calendar, we conducted this study among Tunisian women to determine their HPV status.

Methodology This was a prospective one-year study (2022) of women aged 25–65 years. All the women had a cervicovaginal smear (FCV) in a liquid medium with an HPV test type Nova prep. In the case of positivity, we completed genotyping.

Results Seventy-three women were included. The average age was 42.5 years. They were menopausal in 24.6% of cases (n = 18/73). They were married in most cases (n = 64/73), i.e., 87.6%. The socio-economic level was low in 17.8% of cases (n = 13/73). Nine women were illiterate, and 37 had primary education (n = 45/73, or 61.6%). Five women were smokers. One woman reported multiple partners. Two women had a history of sexually transmitted infections. Immunosuppressive treatment was found in one case. Eleven women had a previous FCV (n = 11/73), of which one had a high-grade lesion. The HPV test was negative in 93.1% of cases (n = 68/73). Two cases were positive for genotype 16. The FCV was normal in 64.3% of cases (n = 47/73). The FCV was pathological in the two HPV16-positive cases, with one case of an indeterminate lesion and one of a high-grade lesion. We completed a colposcopy with biopsy for histological examination.

Conclusion Efforts should be focused on the early detection of precancerous lesions through the dissemination of the practice of FCV screening among sexually active women.

Disclosures No disclosures.

Abstracts

Automated Diagnosis of Colposcopy Images Using a Novel Segmentation and Classification Algorithm

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Introduction/Background Multiple deep-learning techniques in colposcopy have been tested over the past years with diagnostic accuracy results varying between 50 and 97%. The goal of this study was to evaluate the accuracy of a novel perceivert classification method after an automated segmentation method of digital images of the uterine cervix.

Methodology 1,423 digital native, aceto and iodine colposcopy images with colposcopy assessment (Rio 2001 classification) and cervical biopsy result from 484 patients with cervical intraepithelial neoplasms of the Freiburg colposcopy clinic were collected and analyzed (time period 2017 – 2021). The images were down-sampled and the segmentation was performed by identifying a small core of the region of interest (ROI) followed by expanding this small core to the actual one by using a label propagation algorithm on the neighborhood graph of the super pixels. To classify the images to the CIN categories, perceivert which is a transformer based deep neural network has been trained and tested. An implementation of the of the applied network is available in Keras Github.

Results Normal/uncertain/minor changes/major changes colposcopy findings were observed in 175 (25%), 15 (2%), 250 (36%) and 260 (37%) patients with corresponding diagnoses of CIN I/CIN II/CIN III/invasive cancer in 27 (4%), 71 (10%), 154 (22%), 47 (6%) patients. Automated segmentation identified the ROI in 98.7%. The perceivert classification achieved 100% test accuracies on a nested cross fold validation setting.

Conclusion This novel automated image segmentation and classification of digital colposcopy images outperforms most current state of the art methods. A prospective assessment will assess its external validity and clinical usefulness.

Disclosures No disclosures.