

and rectum in the middle line, surgery was open, conducted traditionally, and as described in the literature. Postoperative care went without any complications, and the patient was discharged from the clinic on time. The histopathological analysis classified the tumor as IB1 gradus I. Adjuvant radiotherapy was suggested and also performed after the definite pathohistological diagnosis.

#### Conclusion

#### 2022-RA-1034-ESGO SMALL CELL NEUROENDOCRINE CARCINOMA OF THE CERVIX

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**Introduction/Background** Small cell neuroendocrine carcinoma of the cervix is a rare, aggressive malignancy that is accounting about 1–2% of the cervical cancers. The diagnosis of neuroendocrine cervical cancers occurs at an average age of 45 years. There is no standard treatment based on controlled trials because of the rarity of the malignancy. The prognosis is poor, with an overall 5-year survival rate of about 35%.

**Methodology** We report the case of a 33-years old woman with an exophytic tumour of the cervix. The cervical biopsy showed a small cell neuroendocrine carcinoma. The CT-Scan of the chest and abdomen showed enlarged retroperitoneal lymph nodes and the large cervical tumour. The case was presented in the local tumour board (cT1B3, cN1, M0, G3/FIGO IIIC1), it was decided to start neoadjuvant treatment with Carboplatin AUC6 day 1 and Etoposide 120 mg/m<sup>2</sup> days 1–3. After 4 cycles we confirmed gut clinical response with local regression in the pelvic MRI. We performed a radical hysterectomy with BSO and pelvic and paraaortal lymph node dissection. After histopathological work-up the tumour regression was confirmed: ypT1B1, pN1 (3/75), M0, L1, V0, Pn1. It followed the second discussion in the local tumour board. We decided a treatment with 2 additional cycles of Carboplatin and Etoposide followed by chemoradiotherapy, which were applied sequentially.

**Results** The follow-up controls up to 8 months after surgery showed no signs of cancer recurrence.

**Conclusion** Our observation confirms that cervical neuroendocrine small-cell carcinoma is a chemosensitive tumor. For tumours which are primarily not suitable for operation neoadjuvant chemotherapy should be started, followed by radical surgery when applicable.

#### 2022-RA-1037-ESGO EFFECT OF ALPHA-LIPOIC ACID SUPPLEMENTATION ON REGRESSION OF LOW-GRADE SQUAMOUS INTRAEPITHELIAL LESIONS

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**Introduction/Background** Low-grade squamous intraepithelial lesions (LSILs) account for most of the cytological anomalies for screening cervical cancer. Although they often regress spontaneously, the exact rates of regression are hard to predict and they can range between 7% and 95%. This research aimed to investigate the efficiency of alpha-lipoic acid (LA) in promoting spontaneous regression of LSIL.

**Methodology** A total of one hundred (100) patients diagnosed with LSIL were randomized to receive 600 mg/day of alpha-lipoic acid (ALA) or placebo for three months. Inflammatory parameters (sedimentation, high-sensitivity CRP fibrinogen and IL6) were determined immediately after blood sampling. LSIL was determined after performed cytological screening, targeted biopsy and histological confirmation of cytological-colposcopic diagnosis. Analyses were conducted at the study baseline and at the end of intervention. Comparison of results (before and after supplementation; control-tested) was performed using the Mann-Whitney U test or Chi-squared test, depending on the type of obtained data.

**Results** There were no significant differences in baseline levels of sedimentation, high-sensitivity CRP fibrinogen and IL6 between patients in control and treatment group. ALA supplementation didn't have significant impact on analysed inflammation markers. Contrary to our expectations, supplementation with ALA significantly reduced spontaneous regression of LSIL – from 88.9% in placebo group to 11.1% in treated group (p<0,001).

**Conclusion** ALA supplementation in investigated regime (600 mg/day for 3 months) was not effective in improving inflammation markers in patients with LSIL however, however it significantly decreased the rates of spontaneous LSIL regression in comparison to placebo. Therefore, it can be recommended as a dietary supplement for patients with diagnosed LSIL.

#### 2022-RA-1042-ESGO THE PROGNOSTIC IMPACT OF ANAEMIA IN CERVICAL CANCER PATIENTS TREATED WITH CHEMORADIATION

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**Introduction/Background** Anaemia is common in patients with cervical cancer. Existing guidelines emphasise the importance of maintaining haemoglobin levels above 120 g/L in cervical cancer patients undergoing chemoradiation. The aim of the study is to evaluate the impact of anaemia on the clinical outcomes in patients with cervical cancer referred for chemoradiation.

**Methodology** 135 patients (median age was 48 years) with cervical cancer (squamous= 79.3%, Adenocarcinoma= 12.6%, Adenosquamous= 8.1%) referred for radical chemoradiation between January 2013 and December 2017 were reviewed retrospectively. The FIGO stages for the group were: Ib2 = 11%; II = 42%; III = 39%; IVa = 8%. Patients underwent chemoradiation with external beam radiotherapy with concurrent weekly cisplatin for five cycles followed by high-dose-rate brachytherapy. Factors included in the analysis were age, histology, FIGO stage, nodal status, pre-treatment haemoglobin, pre-brachytherapy haemoglobin and post treatment haemoglobin.

**Results** After a median follow-up of 42 months, the 3 year local failure rate for the whole group, pre-treatment Hb <

120 g/L and pre-brachytherapy Hb < 120 g/L was 9%, 15% and 22% respectively. The 3 year overall survival rate was 72%, 65% and 49% respectively. 52 patients (38.5%) had anaemia at presentation (Hb < 120 g/L). There was significant association between anaemia and younger age, more advanced stage and lymph node involvement. Anaemia was corrected by blood transfusion and/or ferric carboxymaltose. The pre-brachytherapy Hb level had the strongest impact on both local failure and survival. The post-treatment Hb level did not have an impact on the outcomes.

**Conclusion** Anaemia in patients with cervical cancer undergoing chemoradiation was a strong prognostic factor for local control and survival. The pre-brachytherapy Hb level had the strongest impact indicating the benefit from correcting the anaemia before treatment and maintaining the Hb level above 120 g/L during the treatment.

#### 2022-RA-1048-ESGO CIRCULATING HPV CELL-FREE DNA IN CERVICAL CANCER

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**Introduction/Background** Human papillomavirus (HPV) related cervical cancer is the fourth most frequent cancer in women worldwide. Currently patient follow-up and therapy monitoring is solely based on clinical examination and cross-sectional imaging. Liquid biopsies for cell-free circulating tumor DNA in cancer are a novel biomarker to detect treatment response, residual disease, and relapse. The aim of this study was to investigate the potential use of cell-free circulating HPV-DNA (cfHPV-DNA) in plasma samples of patients with cervical cancer. **Methodology** In this proof-of-concept study cfHPV-DNA levels were measured using a highly sensitive Next-Generation-Sequencing-based approach targeting a panel of 13 high-risk HPV-types. For nine patients cfHPV-DNA sequencing was compared to HPV testing in corresponding paraffin embedded tumor sample. Sequential plasma samples were taken from four patients receiving primary chemoradiation.

**Results** A total of 70 blood samples was collected from n=35 patients. cfHPV-DNA was successfully detected in 25/35 (71%) patients; of them, 8 patients had some surgical pretreatment when the sample was collected. A significant correlation between tumor burden and cfHPV-DNA detection was observed: while cfHPV-DNA was detectable in most patients (20/22) with locally advanced or metastatic disease (FIGO IB3 – IVB), detection was successful in only 5/13 patients with early-stage disease (FIGO IA – IB2), p<0.005. When pre-treated patients were excluded, the detectable rate was 100% (18/18) for advanced stages and 55% (5/9) for early stages. HPV-types detected in plasma samples matched results from tumor tissue HPV testing. Sequential sampling for patients under primary chemoradiation showed a dynamic decrease of cfHPV-DNA levels corresponding treatment response in all patients.

**Conclusion** In this proof-of-concept study we were able to detect cfHPV-DNA in plasma samples of patients with primary and recurrent cervical cancer. Our findings may hold potential to develop a powerful and easily accessible tool in cervical cancer management.

#### 2022-RA-1060-ESGO RETROPERITONEAL PARAORTIC LYMPH NODE STAGING IN ADVANCED CERVICAL CANCER: TUNISIAN EXPERIENCE

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**Introduction/Background** Locally advanced cervical cancer is treated with Radio-chemotherapy and brachytherapy. Therefore; a pre-treatment para-aortic lymph node assessment is important for disease staging and therapeutic implications. Our study aimed to analyze the Tunisian experience of laparoscopic lymphadenectomy for patients with locally advanced cervical cancer.

**Methodology** We reported 29 patients with locally advanced cervical cancer who underwent laparoscopic lymphadenectomy at our Institute between 2016 and 2022.

**Results** The mean age was 44 years. Patients were staged IIC1 in 48.2%, 2.5% were IIB, 6.9% were IVA, 6.9% IB1, 6.9% IB3 and 2.8% were IIA2. CT scan and MRI showed suspicious pelvic lymph nodes in 65.5% and suspicious para-aortic lymph nodes in 17.9% of cases. All patients underwent para-aortic lymph node dissection after a mean time of 6 days. Our technique was 68.9% Transperitoneal and 31.01% extraperitoneal. The mean time duration was 2:37Hours. There was no per-operative or postoperative complications. One patient had a blood transfusion The mean time of hospital stay was 2 days. Pathological examination found a mean number of 9Nodes (range 2–22 removed lymph nodes).

There was 32.17% of invaded lymph nodes. sensitivity and specificity were respectively 100% and 83.3%, and VPP was 33.3%. All patients had radiochemotherapy for their cervical cancer.

**Conclusion** Pre-treatment laparoscopic staging surgery plays an important role in the treatment and the decision of the radiation field. Although imaging modalities are improving, the current gold standard for determining lymph node status is surgical sampling mainly in developing countries with difficult access to PET-CT.

#### 2022-RA-1067-ESGO IS LAPAROSCOPIC RADICAL HYSTERECTOMY SAFE IN CERVICAL CANCER WITH TUMOR SIZE ≤2 CM, EVEN IF PARAMETRIAL INVASION OR LYMPH NODE METASTASIS IS FOUND AFTER SURGERY?

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