11–26% of patients, respectively (table 1). Treatment modification consisted mainly of nodal boosting (83%), followed by extended-field radiotherapy (62%) and debulking (12%). Sensitivity analysis slightly increased the estimated undertreatment rate from 9–11% to 12%, whereas the overtreatment rate was reduced from 11–26% to 5%.

<table>
<thead>
<tr>
<th>Abstract #814 Table 1</th>
<th>Treatment modification, overtreatment and undertreatment rates in advanced-stage cervical cancer patients with FDG-positive lymph nodes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary analysis</td>
<td>Sensitivity analysis</td>
</tr>
<tr>
<td>Positive predictive</td>
<td>% 70-87</td>
</tr>
<tr>
<td>Prevalence of nodal metastases</td>
<td>% 99</td>
</tr>
<tr>
<td>Treatment modification</td>
<td>% 100</td>
</tr>
<tr>
<td>Undertreatment</td>
<td>% 100</td>
</tr>
<tr>
<td>Overtreatment</td>
<td>% 100</td>
</tr>
</tbody>
</table>

Conclusion PET-CT had a significant impact on nodal treatment plans with modification rates of up to 87%, mainly consisting of nodal boosting. Therefore, the estimated undertreatment rate is relatively low (9–11%), while overtreatment may affect up to one quarter of patients (11–26%). The higher the likelihood of nodal metastases, the more patients will benefit from these treatment plan modifications.

Disclosures The authors have nothing to disclose besides that this work was supported by the Dutch Cancer Society [IKNL2019–12398].

#819 PELVIC EXENTERATION: OUTCOMES OF SEVEN PATIENTS IN A TERTIARY SETTING

Introduction/Background Pelvic exenteration is an ultraradical surgery performed for selected cases in genital tumors. When free surgical margin is achieved, up to 40% 5 year survival is possible in select cases. We present our 7 year experience in a tertiary hospital setting.

Methodology All patients undergoing pelvic exenteration in Akdeniz University Department of Gynecology were retrospectively evaluated.

Results Totally 7 patients were included. The median age was 68 years. All patients was diagnosed with recurrent or locally advanced cervical cancer. One patient underwent for palliative purposes. All but one was infrarectal exenteration. One patient experienced aorto-jejunal fistula 15 months after exenteration. She was re-operated but succumbed to the disease. Two patients are alive without any evidence of disease. Progression free survival was 18 months, five patient died of disease (one because of Porto-jejunal fistula, one from sepsis 3 months after the surgery who had been operated for palliative purposes).

Conclusion Complications after pelvic exenteration are common. Re-operations and re-admission are also frequently seen. In highly selected patients, when free margins are achieved, long term survival is possible.

Disclosures None

#820 SURVIVAL ASSOCIATED WITH THE USE OF ONE-STEP NUCLEIC ACID AMPLIFICATION (OSNA) TO DETECT SLN METASTASIS IN CERVICAL CANCER

Introduction/Background Sentinel lymph node (SLN) biopsy is part of surgical treatment of apparent early-stage cervical cancer. SLN is routinely analyzed by ultrastaging and immunohistochemistry. Recently, one-step nucleic acid amplification (OSNA) method has been demonstrated to be an accurate tool to detect SLN metastases in cervical cancer with the advantage of a rapid standardized technique with no sampling bias. Nevertheless, oncological safety of OSNA method in cervical cancer has not been previously explored. The aim of this study was to assess the disease-free survival of patients undergoing SLN analyzed by OSNA compared with ultrastaging.

Methodology Single-center, retrospective, cohort study. Patients undergoing SLN mapping (± pelvic lymphadenectomy) and primary surgery for apparent early-stage cervical cancer between 05/2017 and 01/2021 were included. SLN was analyzed entirely with OSNA or with ultrastaging. Patients with SLN mapping failure, with SLN analyzed alternatively/serially with OSNA and ultrastaging and undergoing neo-adjuvant therapy were excluded. Appropriate statistical tests were used.

Results One-hundred and fifty-seven patients were included, 50 (31.8%) in the OSNA group and 107 (68.2%) in the ultrastaging group. Patients’ characteristics are showed in table 1. The only significant difference between the two groups was the incidence of lymph node metastasis (28.0% versus 10.3% in OSNA versus ultrastaging group, respectively; p=0.009). A trend toward higher incidence of micrometastases detection in OSNA group was noted (table 1). Median follow up time was 41 months (95%CI:37.9–42.2). 5-year DFS in patients undergoing OSNA versus ultrastaging was 87.0% versus 91.0% (p=0.089). No difference in the incidence of lymph node recurrence between the two groups was noted (OSNA 20.0% versus ultrastaging 18.2%, p=0.931).
Abstract #820 Table 1  Characteristics of patients with SLN analyzed by OSNA and ultrastaging.

<table>
<thead>
<tr>
<th>SLN</th>
<th>OSNA (%)</th>
<th>Ultrastaging (%)</th>
<th>p-value</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>72.4%</td>
<td>72.4%</td>
<td>0.691</td>
</tr>
<tr>
<td>No</td>
<td>27.6%</td>
<td>27.6%</td>
<td></td>
</tr>
</tbody>
</table>

Conclusion The use of OSNA to entirely assess the presence of SLN metastases in cervical cancer was not associated with worse DFS compared to ultrastaging. Incidence of lymph node recurrence in the two groups was not different.

Disclosures None

#834 HIGH-RISK HUMAN PAPILLOMAVIRUS-INFECTED PATIENTS WITH HIGH METHYLATION LEVELS OF JAM3/ PAX1 IN CERVICAL EXFOLIATED CELLS ARE DIAGNOSED WITH HIGH-GRADE CERVICAL LESIONS

Xingping Zhao*, Dan Sun, Dabao Xu.

Introduction/Background Traditional screening methods for cervical cancer, such as high-risk human papillomavirus (hrHPV) testing and cervical cytology, have limitations. There is a clinical need for more precise patient triage methods.

Methodology A total of 136 patients who underwent examination were included in this study. Among them, 122 patients had non-high-grade cervical lesions (control group) and 14 patients had high-grade lesions (study group). The variables studied included basic information (age, BMI, menopausal status), Thinprep cytologic test (TCT) results, high-risk human papillomavirus (hrHPV) status, cervical tissue pathology, vaginal microbiota diversity, and ΔCt values of JAM3 (ΔCtJ) and PAX1 (ΔCtP) gene methylation.

Results Univariate analysis revealed significant differences in ΔCt values of PAX1 and JAM3 gene methylation and TCT results between the two study groups. Correlation analysis showed a negative correlation between cervical pathology results and ΔCtP, ΔCtJ, TCT, and vaginal microbiota diversity. The conditional inference tree model showed that when ΔCtP > 10.13, all patients had non-high-grade cervical lesions. When ΔCtP > 6.22, 97.5% of patients had non-high-grade lesions, while only 2.5% had high-grade lesions. When ΔCtJ > 8.61 and TCT showed atypical squamous cells of undetermined significance (ASC-US) or negative for intraepithelial lesions or malignancy (NILM), 99.1% of patients had non-high-grade lesions, with only one (0.9%) detecting PAX1/JAM3 high-grade lesions. When TCT indicated high-squamous intraepithelial lesions (HSIL), only 66.7% of patients had high-grade lesions. However, when TCT- indicated low-squamous intraepithelial lesions (LSIL), ASC-US, or NILM, and ΔCtP > 6.22, 97.5% of patients had non-high-grade lesions.

Conclusion The dual-gene methylation detection of JAM3/PAX1 can be independently used or combined with TCT for stratified diagnosis of high-grade/non-high-grade cervical lesions in women with HPV infection.

Disclosures No potential conflict of interest was reported by the authors.

#851 HIGH-DOSE-RATE BRACHYTHERAPY BOOST FOR LOCALLY ADVANCED CERVICAL CANCER: ONCOLOGICAL OUTCOME AND TOXICITY ANALYSIS OF 2 FRACTIONATION SCHEMES

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Introduction/Background Brachytherapy boost plays a fundamental role in the therapeutic approach of patients with locally advanced cervical carcinoma. As there is no consensus on fractionation scheme for high dose rate brachytherapy treatment. The aim of our study was to report the oncological and toxicity results of two fractionation schemes.

Methodology This is a retrospective study performed in a Department of radiotherapy at EHSO Emir Abdellah in Oran - Algeria, including 149 patients treated between January 2014 and December 2019.

All patients received concomitant chemo radiotherapy at a dose of 46 Gy, followed by HDR uterovaginal brachytherapy with two different fractionations: 19.5Gy in 03 fractions (group1), and the 25Gy in 5 fractions (group2).

Results The 6.5Gyx5 regimen was used in 95 patients (64%), and the 5GyX5 regimen was used in 54 patients (36%).

The median follow-up was 41.72 months, the median EQD2 (α/β=10) of D2cc of 76.8±4.7% and 74.6±9% for group 2 (p=0.563), with a nonsignificant difference between the two groups. Grade 3 urinary toxicity for group 1 was 87.9±3.7% and 93.3±3.7% for group 2 (p=0.123). The 5-year recurrence-free survival for group 1 was 87.9±3.7% and 93.3±3.7% for group 2 (p=0.377), while the 5-year overall survival for group 1 was 78.6±4.7% and 74.6±9% for group 2 (p=0.563), with a non-significant difference between the 2 groups. Grade 3 urinary toxicity for group 1 and 2 was 12.1%/16.1% (p=0.096), and 7.9%/12.5% for grade 3 digestive toxicity (p=0.776).