to the percentage of satisfactory smears or the rate of detection of abnormal cells.

Conclusion: Our results support the efficacy of spatula-cytobrush for cervical cancer screening.

Poster (C06)

Cervical Cancer

<https://doi.org/10.3802/jgo.2021.32.S1.C06>

Utility of radiomics for predicting patient local control in cervical cancer with chemoradiotherapy

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Objective: The aim of this study was to develop a predictive model combining radiomic features with clinical characteristics for predicting local control (LC) in cervical cancer patients receiving intensity modulated radiotherapy (IMRT).

Methods: This was a retrospective analysis of 161 patients with cervical cancer treated with IMRT, using data acquired between May 2012 and March 2017. We extracted the radiomic features from computed tomography (CT) scans. Least absolute shrinkage and selection operator regression was used to filter the extracted radiomic features and reduce the dimensionality of the data. Rad-score was calculated by the selected radiomic features. Multivariate Cox-regression hazard models was established to analyze the LC of cervical cancer patients, and a Nomogram prediction model based on Rad-score and clinical characteristics was used to demonstrate the prediction model. The prediction reliability was evaluated by the area under the receiver operating characteristic curve and Harrell's concordance index. Decision curve analysis evaluates the application value of the Nomogram. The heat map shows the relationship between radiomics features and clinical characteristics. According to the cut-off value of Rad-score, all patients were classified as low-risk or high-risk.

Results: A total of 5 radiomic features and 2 clinical characteristics were extracted for analysis. A combination of the Rad-score and clinical characteristics resulted in better performance for the estimation of 5-year LC (area under the curve [AUC]=0.780; confidence interval [CI]=0.690–0.870) than that with clinical characteristics alone (AUC=0.680; CI=0.590–0.770). These patients were divided into high-risk and low-risk groups according to the cut-off value of Rad-score.

Conclusion: This study shows that the combination of CT extracted radiomic features and clinical characteristics has a good potential for evaluating LC in patients with cervical cancer treated with IMRT.

Poster (C07)

Cervical Cancer

<https://doi.org/10.3802/jgo.2021.32.S1.C07>

Pretreatment lymphocyte counts as independent prognostic factors in patients with locally advanced cervical cancer treated with concurrent chemoradiotherapy

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Objective: To evaluate the association between pretreatment total lymphocyte counts (TLC) and survival in locally advanced cervical cancer patients treated with concurrent chemoradiation (CCRT).

Methods: A Retrospective analysis of 789 patients diagnosed cervical cancer stage IIB to IVA who treated with primary CCRT from January 2011 to December 2015 was performed.

Pretreatment TLC was evaluated for an association with 5-year disease free survival (DFS) and overall survival (OS) rates.

Results: Seven hundred and eighty-nine patients were included in the study. There were 52 patients had pretreatment TLC <1,000 cells/mm³. The median pre-treatment TLC in groups TLC <1,000 cells/mm³ and >1,000 cells/mm³ were 573.9 cells/mm³ (range=350.9–827.7 cells/mm³) and 2,211.3 cells/mm³ (range=1,751.3–2,785.8 cells/mm³) respectively. Patients in pretreatment TLC <1,000 cells/mm³ group had fewer number of treatment response and trend to present in more advance stages of disease and larger tumor size. The 5-year DFS and OS rates were significantly higher in patients with pretreatment TLC >1,000 cells/mm³ than the counterparts (67.7% vs. 35.4% [p<0.0001], 57.6% vs. 25.7% [p<0.0001]). Multivariate analysis showed pretreatment TLC >1,000 cells/mm³ was independent predictors of DFS (hazard ratio [HR]=0.39; 95% confidence interval [CI]=0.26–0.59; p<0.001) and OS (HR=0.59; 95% CI=0.42–0.84; p=0.006) after adjusted with age, stages of disease and tumor size.

Conclusion: Pretreatment TLC were associated with treatment response, and also the survival outcome in patients with locally advanced stage cervical cancer treated with definite CCRT.

Poster (C08)

Rare Tumors & Metastatic Tumors

<https://doi.org/10.3802/jgo.2021.32.S1.C08>

Primary diffuse large B-cell lymphoma of uterine cervix presenting with bulky cervical mass: a case report and review

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