Risk factors of recurrence in early-stage vulvar cancer (FIGO2021 I-II): insights from a retrospective study

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INTRODUCTION

Despite early-stage diagnosis, 1 in 5 patients with FIGO I–II vulvar cancer relapse within five years. We collected and analyzed the clinical and pathological data of this population to identify prognostic factors.

METHODS

Between January 2010 and December 2023, we conducted a monocentric retrospective study of 144 patients treated for early-stage vulvar cancer (FIGO2021 I-II) at the CHU of Liège. Comparisons between groups were made using Chi-square and t-Student/Kruskal-Wallis tests.

RESULTS

Among the 144 patients treated for localized vulvar cancer (FIGO stages I–II), 28 (19.4%) experienced a relapse (66,7% local, 25,9% distant, 7,4% local + distant). Each additional year of age at diagnosis increased the risk of recurrence by 3.9%. The presence of lichen sclerosus was correlated with a 2.6-fold increased risk of relapse. Laterally located tumors had a 2.7-fold higher recurrence risk compared to midline lesions. Each 1mm increase in tumor size was with a 22.9% higher recurrence risk. A stromal invasion depth ≥ 1.8 mm was correlated to a threefold increased risk; moreover, poorly differentiated tumors recurred 2.7 times more often than well-differentiated ones. In contrast, a past history of intraepithelial neoplasia (vulvar, vaginal, anal, or cervical) and adherence to ESGO 2023 recommendations were associated with an 88.8% and 60,2% risk reduction of recurrence, respectively.

CONCLUSION

Older age, lichen sclerosus, lateral tumors, stromal invasion, tumor size, and poor differentiation increase risk of recurrence, while guideline adherence and prior neoplasia absence are protective. Risk stratification could optimize adjuvant treatment and follow-up intensity.