Abstract:

**EXPRESSION OF L1CAM IN CURETTAGE AND HIGH L1CAM LEVEL IN PREOPERATIVE BLOOD SAMPLES PREDICTS LYMPH NODE METASTASES AND POOR OUTCOME IN ENDOMETRIAL CANCER PATIENTS**

**Aims**

Several studies have identified L1CAM as a strong prognostic marker in endometrial cancer. To further underline the clinical usefulness of this biomarker, we here investigated L1CAM as a predictive marker for lymph node metastases and its prognostic impact in curettage specimens and preoperative plasma samples.

**Method**

Immunohistochemical staining of L1CAM was performed for 1134 curettage specimen from endometrial cancer patients. In addition L1CAM level in preoperative blood samples from 372 patients was determined using ELISA. Association between L1CAM level and clinicopathologic variables including lymph node status and survival was investigated.

**Results**

Expression of L1CAM in curettage specimen was significantly correlated to L1CAM level in corresponding hysterectomy specimen. Both in curettage specimen and preoperative plasma samples was L1CAM upregulation significantly associated with features of aggressive disease and poor outcome. L1CAM was an independent predictor of lymph node metastases, after correction for curettage histology, both in curettage specimen and plasma samples.

**Conclusion**

We demonstrate that preoperative evaluation of L1CAM levels, both in curettage or plasma samples, predicts lymph node metastases and adds valuable information on patient prognosis. Our results strongly support the usefulness of L1CAM as a biomarker in endometrial cancer.

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