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学位論文内容の要約

学位論文題目

Changes in High Endothelial Venules with Progression of
Oral Squamous Cell Carcinoma
(口腔扁平上皮癌進展に伴う高内皮細静脈の変化)

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Tumor-associated HEV (TA-HEV) density has been reported to correlate with a favorable prognosis in various tumors, including oral squamous cell carcinoma (OSCC). Although TA-HEV is recognized to correlate with better prognosis, its changes during tumor progression remain unclear. This study aimed to investigate these changes using a mouse OSCC model. During the dysplastic stage, blood vessels increased in number and showed reduced pericyte coverage as carcinoma developed. Moreover, HEVs were more frequently detected in the dysplasia and carcinoma groups. The number of HEV that CD8⁺ T cells infiltrated around increased as the lesion progressed. HEV location and morphology also changed during the transition from normal tissue to carcinoma. The distribution of TA-HEVs was associated with tumor growth patterns: they were more frequently located within the tumor in endophytic carcinomas and at the tumor margins in exophytic carcinomas. Margin TA-HEVs were correlated to more cytotoxic T cells compared to HEVs within tumors. These findings suggest that TA-HEV formation is induced during cancer progression and that their location varies according to tumor growth patterns. TA-HEVs at the tumor margins may play a role in inhibiting tumor invasion through their association with increased cytotoxic T cells.