中文題目：Axl是口腔鱗狀細胞癌的預後指標

英文題目：Axl Is a Prognostic Marker in Oral Squamous Cell Carcinoma

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Background

Overexpression of the receptor tyrosine kinase Axl is implicated in several diseases. The present study was conducted to determine the biologic and clinical significance of Axl in oral squamous cell carcinoma (OSCC).

Methods

The expression of Axl was examined in a panel of OSCC cell lines. Activation of Axl by Gas6 treatment and silencing of Axl via Axl shRNA were used to examine the effect of Axl on OSCC cell line. Expression of Axl in cancer tissues were examined by immunohistochemical staining. The associations between Axl expression and clinicopathologic features and prognosis were analyzed.

Results

Varied Axl expression was noted in OSCC cell lines. Compared with control cells, modulated Axl signal affected epithelial-mesenchymal gene expression and cell invasion and migration. The immunoreactivity of Axl was low in normal epithelium, and a progressively increased positive percentage was noted, from normal/hyperplastic epithelium (10.9%) to dysplasia (30.8%) to cancer tissue (54.5%). Axl expression correlated with lymph node status (P = .001) and clinical stage (P = .014) of OSCC. Patients with high expression of Axl showed poor prognosis compared with those with low Axl expression patients (P\.001). In multivariate prognostic analysis according to the Cox proportional hazard regression model, Axl expression remained as an independent prognostic factor (P = .037; CI, 1.042–3.839).

Conclusion

Our data indicated that Axl signal promotes OSCC carcinogenesis and progression. The expression of Axl is a valuable marker for OSCC aggressiveness and clinical outcome.