論文審査の結果の要旨

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(論文審査の結果の要旨)

It is difficult to completely remove tumors with appropriate surgical margins due to anatomical limitations in OSCC. Barrier approaches which targeting anatomical and pathological defensive structures. The aim of this study was to identify a biomarker that could be used to predict adipose tissue invasion in OSCC.

The immunohistochemistry (IHC) staining of 30 primary OSCC patients whose surgical specimens was performed. Seven molecules as candidate predictive markers of fatty infiltration including MMP11, Collagen VI, E-cadherin, N-cadherin, α-SMA, FABP4 and IL6 were used for IHC. Adipose tissue invasion was assessed HE stained sections. The relationship between the tumor surface and tumor-adipose tissue contact area was also examined.

As a result, Han Yi Bing obtained the following results.

- In the tumor with fat invasion, strong expression of E-cadherin was evident in tumor surface, strong expression of α-SMA in the tumors of invasion front and surrounding connective tissues, and FABP4 only in connective tissues. On the other hand, Collagen VI immunoreactivity disappeared in the OSCC with fat invasion.
- 2) From the comparison of H-Score at tumor surface and tumor-fat contact area, with the exception of IL-6, H-Scores were significantly correlated in the superficial and infiltrated areas. Except for E-Cadherin, the H-Score was higher in the infiltrated area.
- 3) The result of the comparison of IHC reactivity on the tumor surface with and without fat invasion shown N-cadherin expression showed a tendency to be associated with buccal fat pad invasion.
- 4) The result of the comparison of IHC reactivity on the Tumor adipose tissue contact area with and without fat invasion are shown a tendency for the expression of α-SMA and FABP4 to be more frequent in cases of fatty infiltration. Significantly less Collagen VI was observed in fatty infiltration cases.

From these results, the expression levels of α -SMA and FABP4 at connective tissue at tumor invasion area may be useful biomarkers for predicting adipose tissue invasion in OSCC. It would be possible to determine the optimal excision range using the fat layer as an anatomical barrier.

In reviewing the thesis, there were some corrections to the figures in the tables in the thesis, but we confirmed that they were within the acceptable range in terms of content. The primary and secondary reviewers unanimously approved the thesis as a valuable thesis.

(審査にあたって論文中の表の数字の訂正があったが、内容的に問題ない範囲である事を確認した。主査、副査は一致して本 論文を学位論文として価値あるものと認めた。)