CD44 and β-catenin are adhesion molecules expressed on a wide variety of cells. Failure of this expression is believed to lead to disruption of cell-cell adhesion and to neoplasia. The aim of this study was to investigate the staining intensity of CD44 and β-catenin in keratoacanthomas and squamous cell carcinomas of the skin. The proliferation index, PCNA staining, was also evaluated in these cases. The abnormal expression of β-catenin significantly predominated in squamous cell carcinomas (n = 20, 76.9%) compared with keratoacanthomas (P = 0.002, \( \chi^2 = 7.8 \)). Most keratoacanthomas (n = 11, 61.1%) more frequently showed strong staining intensity with CD44 compared with squamous cell carcinoma (P = 0.001, \( \chi^2 = 13.7 \)). The proliferation index was higher in squamous cell carcinoma (P = 0.000, \( \chi^2 = 12.8 \)). These findings suggest that CD44 and β-catenin expression may have an important role in the development of malignancy and in the determination of biological features of keratoacanthoma and squamous cell carcinoma of the skin.

Key words: β-catenin, CD44, keratoacanthoma, squamous cell carcinoma.

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