



Intensity of Caveolin-1 Expression in Basal Cell Carcinoma

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SUMMARY. Caveolin-1 is an integral membrane protein that is the primary component of cell membrane invaginations called caveolae. Caveolin-1 is involved in a number of important cellular functions. Caveolin-1 is extensively expressed in adipocytes, endothelial cells, and smooth muscle cells, all of which are terminally differentiated mesenchymal cells. Caveolin-1 (Cav1) is a scaffolding protein that controls the function of a variety of signalling molecules. Its absence has been linked to the development of numerous cancers. Also it has role in carcinogenesis either tumor promoter or suppressor. Basal cell carcinoma is the most common type of nonmelanoma skin cancer. This study was done to detect its role in basal cell carcinoma either tumor promoter or suppressor. **Materials and methods:** Thirty patients were enrolled in this study. Skin biopsies were taken from patients and immune histochemical staining of caveolin 1 was done. There was statically significant difference between IRS score inside and outside BCC ($p=.002$). Caveolin 1 was high in BCC. **Conclusion:** Caveolin 1 expression increased in BCC especially in outer part of tumor reflecting its role in tumor progression.

RESUMEN. La caveolina-1 es una proteína de membrana integral que es el componente principal de las invaginaciones de la membrana celular llamadas caveolas. La caveolina-1 participa en varias funciones celulares importantes. La caveolina-1 se expresa ampliamente en adipocitos, células endoteliales y células del músculo liso, todas las cuales son células mesenquimales diferenciadas terminalmente. La caveolina-1 (Cav1) es una proteína de andamiaje que controla la función de una variedad de moléculas de señalización. Su ausencia se ha relacionado con el desarrollo de numerosos cánceres. También tiene un papel en la carcinogénesis como promotor o supresor de tumores. El carcinoma de células basales es el tipo más común de cáncer de piel no melanoma. **Objetivos:** Este estudio se realizó para detectar y métodos: Treinta pacientes fueron incluidos en este estudio. Se tomaron biopsias de piel de los pacientes y se realizó tinción histoquímica inmune de caveolina 1. Hubo una diferencia estadísticamente significativa entre la puntuación del IRS dentro y fuera del BCC ($p = .002$). La Caveolina 1 fue alta en el BCC. La expresión de caveolina 1 aumentó en BCC, especialmente en la parte externa del tumor, lo que refleja su papel en la progresión del tumor.

KEY WORDS: basal cell carcinoma, caveolin-1, caveolin intensity.

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