The expression of syndecan-1 and -2 is associated with Gleason score and epithelial-mesenchymal transition markers, E-cadherin and ?-catenin, in prostate cancer

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The epithelial-mesenchymal transition (EMT) is considered a key step in tumor progression, where the invasive cancer cells change from epithelial to mesenchymal phenotype. During this process, a decrease or loss in adhesion molecules expression and an increase in migration molecules expression are observed. The aim of this work was to determine the expression and cellular distribution of syndecan-1 and -2 (migration molecules) and E-cadherin and ?-catenin (adhesion molecules) in different stages of prostate cancer progression. A quantitative immunohistochemical study of these molecules was carried out in tissue samples from benign prostatic hyperplasia and prostate carcinoma, with low and high Gleason score, obtained from biopsies archives of the Clinic Hospital of the University of Chile and Dipreca Hospital. Polyclonal specific antibodies and amplification system of estreptavidin-biotin peroxidase and diaminobenzidine were used.

Syndecan-1 was uniformly expressed in basolateral membr