DIFFERENCE IN CYCLOOXYGENASE-2 (COX-2) EXPRESSION BETWEEN LOW AND HIGH GRADE PAPILLARY CARCINOMA IN HUMAN BLADDER CANCER

Abstrak:

The objective of this study was to improve the estimation of the prognostic behavior by difference of cyclooxygenase-2 (COX-2) expression between low and high grade papillary carcinoma of human transitional cell bladder cancer. We used COX-2 expression as a parameter for prognostic behavior. It was studied by immunohistochemical methods in 36 samples of human transitional cell carcinoma of the bladder from pathology archive. COX-2 immunostaining identifies intracytoplasmic content of COX-2 in human bladder cancer cell, measured by scale of staining which is scored 0 (0-9.9%), 1 (10-49.9%), 2 (50-99.9%) and scale of immunostaining intensity which was scored 0 (negative), 1+ (weak), 2+ (strong). The results of this study revealed that COX-2 immunostaining identified 19 high grade papillary carcinoma (16 samples were 2+(strong), 2 samples were 1+(weak), and 1 sample was 0 (negative) and 17 low grade papillary carcinoma (9 samples were 2+(strong), 3 samples were 1+(weak), and 5 samples were 0 (negative). There was a distribution difference in COX-2 expression between low grade and high grade papillary carcinoma (p = 0.035) analyzed by the Mann-Whitney test, favoring more strong of COX-2 expression in high grade tumor than expected with equal distribution. In conclusions, these findings suggest that the difference in COX-2 expression in may be used as an additional biomarker of its progressiveness.

Keyword:
cyclooxygenase-2, high grade papillary carcinoma, low grade papillary carcinoma, bladder cancer, transitional cell carcinoma

Daftar Pustaka:

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