

EXPRESSION AND SIGNIFICANCE OF E-CADHERIN/B-CATENIN COMPLEX IN DETRUSOR INSTABILITY

Hypothesis / aims of study

To study the expression of E-cadherin and β -catenin in the detrusor of human unstable bladder with bladder outlet obstruction(BOO).

Study design, materials and methods

All specimens were divided into detrusor instability(DI)(40cases) group and detrusor stability(DS) (38cases) group according to the urodynamic result. The SP immunohistochemical method was used to detect the expression of E-cadherin and β -catenin.

Results

The positive rate of E-cadherin and β -catenin were noted in both DI and DS tissues. The positive rates of E-cadherin and β -catenin in 38 DS samples were significantly higher than those in the DS group (84.2% vs 57.5%; 68.4% vs 37.5%, $P < 0.01$) accordingly, the expressions (densitometry) were much higher (0.44 ± 0.08 vs 0.23 ± 0.04 , 0.16 ± 0.02 vs 0.04 ± 0.02 respectively, ($P < 0.05$)). The expressions of E-cadherin and β -catenin were negatively correlated with OABSS ($r = -0.43$, $P < 0.05$).

Interpretation of results

The decrease of E-cadherin and β -catenin within the human detrusor is associated with DI. The detection of their expressions may become a new approach to the mechanism of detrusor instability.

Concluding message

Detrusor detrusor instability, E-cadherin/ β -catenin, immunohistochemistry

References

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Disclosures

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