AB153. Down-regulated expression of excision of repair cross-complementing gene 1 reduces resistance to hydroxycamptothecine in bladder cancer

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**Objective:** The purpose of the study was to explore the potential mechanisms that interference of excision of repair cross-complementing gene 1 (ERCC1) mediated by lentiviral vector in bladder cancer T24 Cells.

**Methods:** The expression of ERCC1 was observed by immunohistochemical method in 25 cases of primary bladder cancer and recurrent bladder cancer tissues respectively from 25 patients. T24 cells were silenced targeting ERCC1 by lentiviruses. The transfection efficiency for ERCC1 was observed by fluorescence microscope and the interference efficiency was detected by real-time polymerase chain reaction and western blot assay. CCK-8 assay was used to assess the cell proliferation. Effects of cell apoptosis were detected by flow cytometry. Finally, the pathway of apoptosis was studied by using western blot method.

**Results:** As a result, we discovered that the expression level of ERCC1 in recurrent bladder cancer tissues (52%) was significantly higher than that in primary bladder cancer tissues (20%) (P<0.05). Compared with the T24 cells that did not silence the ERCC1 gene (control group) at different time periods (29.45%, 36.48%, 38.45%, 40.35%), the proliferation of T24 cells that silenced ERCC1 gene (experimental group) (27.25%, 37.45%, 32.5%, 42.05%) was not significantly changed (P>0.05). Hydroxycamptothecine (HCPT) inhibited the proliferation of T24 cells in dosage and time dependent manner. The inhibitory effect of HCPT on the experimental group was significantly higher than that of the control group (P<0.05). With the HCPT concentration increased, the apoptosis rate of the experimental group was significantly higher than that of the control group (P<0.05). After silencing of ERCC1, the sensitivity of T24 cells was increased to HCPT which could inhibit cell proliferation and induce cell apoptosis.

**Conclusions:** Therefore, ERCC1 may be a potential target protein used to guide the postoperative chemotherapy of bladder cancer.

**Keywords:** Bladder cancer; repair cross-complementing gene1; hydroxycamptothecine (HCPT); chemotherapeutic resistance

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AB154. Circulating levels of adipocytokine omentin-1 in patients with renal cell cancer

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**Objective:** Renal cell carcinoma (RCC) is the fifth most common cancer worldwide, and becomes one of the leading causes of genitourinary cancer-related death in both males and females. Genetic alternations, alcohol consumption, occupationally harmful exposure and even obesity are...
well-established risk factors of RCC. Omentin-1 is a plasma adipokine synthesized in visceral adipose tissue, and its circulating serum concentration alters not only in conditions associated with insulin resistance such as Polycystic Ovary Syndrome (PCOS), but also in colorectal cancer and prostate cancer. To our best knowledge, the relationship between omentin-1 and RCC has not been clarified previously.

Methods: Thus, we evaluated serum omentin-1 levels in RCC patients in the current matched case-control study. Forty-one patients newly diagnosed with RCC and forty-two healthy controls confirmed by the comprehensive medical examination were assessed.

Results: The omentin-1 concentrations were determined via utilizing enzyme-linked immunosorbent assays (ELISA) in the paired groups, in which the patients and healthy controls had no statistically significant differences in gender, age, systolic blood pressure (SBP), diastolic blood pressure (DBP), waist-hip ratio (WHR), estimate glomerular filtration rate (eGFR), body-mass index (BMI) and biochemical parameters. The omentin-1 levels in healthy people were 9.86±1.44 ng/mL and the circulating omentin-1 levels were dramatically decreased to 3.62±0.76 ng/mL in RCC patients (P<0.001). Besides, we revealed a negative correlation between omentin-1 with WHR (r=-0.261, P=0.017) and BMI (r=-0.310, P=0.004), further indicating BMI was the main influential factor on omentin-1 levels (P=0.0091).

Conclusions: Follow-up studies would be conducted to establish the concrete mechanisms underlying the altered circulating levels of omentin-1 and elucidate the interaction between “RCC complex system” and adipose tissues, which may together provide promising and novel pharmacological insights for RCC theragnosis in the near future.

Keywords: Adipocytokine; renal cell cancer; Polycystic Ovary Syndrome

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AB155. Primary large cell neuroendocrine carcinoma of ureter: a case report and review of the literature

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Objective: Large cell neriodocrine carcinoma (LCNEC) is an extremely rare malignant tumor in the ureter. To investigate the etiologie, clinical manifestation, diagnosis and treatment of LCNEC.

Methods: We report a case of a 74-year-old woman who complained of right lower back pain and discomfort with intermittent hematuria was admitted to our hospital in 2012. Urinary ultrasound showed right kidney hydroureteronephrosis and left ureteral expansion. The patient did not present clinical symptoms, neither frequent micturition, micturition pain, nor urinary urgency. The blood routine and biochemical parameters were within normal range, except for an elevated serum creatinine level of 156 umol/L and serum urea level of 11.2 mmol/L. Voiding urosonography was performed three times, but the results were negative. As the patient with poor renal function and did not undergo the enhanced computed tomography (CT). CT non-contrast enhanced scan revealed atrophy of the left kidney, right hydroureteronephrosis and a space-occupying lesion (20 mm × 16 mm) in the right lower ureter that was preliminarily considered a ureteral tumor. Emission CT of the kidney showed impaired renal function, as evidenced by a marked decrease in the glomerular filtration rate of the left kidney (7.2 mL/min) and a compensatory increase in the glomerular filtration rate of the right kidney (71.3 mL/min). Flexible ureteroscopes were performed in the patient for further examination, which revealed the ureter clogged by a long strips and gray color stiff mass, with the scope inserted 6 cm to the right ureterostoma. The surface of mass biopsy showed change like urothelial carcinoma. Nephroureterectomy should be perform based on the biopsy result, but considering the patient had single kidney and poor renal function, then the affected ureteric segment was excised, and the ureters were repaired by end-to-end anastomosis with a double-J tube for internal