as a minimally invasive procedure and novel technique for the treatment of RCC.

Conclusions: To our knowledge, this is the first case to date of bilateral RCC treated with simultaneous retroperitoneal laparoscopic nephron-sparing surgery (RLNSS). Here we indicate the feasibility of this management and discuss the advantages and disadvantages of this technique.

Keywords: Renal cell carcinoma (RCC); nephron-sparing surgery (NSS); simultaneous bilateral

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AB052. ZEB1 promotes vasculogenic mimicry formation in prostate cancer is associated with epithelial-mesenchymal transition

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Background: This study investigated the role of ZEB1 in vasculogenic mimicry (VM) formation and the interplay between VM and epithelial-mesenchymal transition (EMT).

Methods: Ninety-two prostate cancer tissue specimens were stained by CD34 and periodic acid Schiff. Then, we stained ZEB1 protein in the consecutive sections. Moreover, prostate cancer cells were subjected to ZEB1 knockdown using ZEB1 siRNA and then to 3D culture assay. EMT related maker was also evaluated.

Results: The data showed that the presence of VM and high ZEB1 expression were associated with higher Gleason score, TNM stage, and lymph node and distant metastases. ZEB1 knockdown reduced VM formation and the expression of EMT-related in prostate cancer cells.

Conclusions: In the current study was the first to reveal that ZEB1 played an important role in VM formation in prostate cancer *ex vivo* and *in vitro*. Mechanistically, this process may have a relationship with EMT.

Keywords: Prostate cancer; vasculogenic mimicry (VM); ZEB1, epithelial-mesenchymal transition (EMT)

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AB053. Labeling of prostate tumor-specific replication-selective oncolytic adenoviruses with radioactive 125I: inhibitory effects on prostate cancer cell

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Background: The authors established a 125I-labeled replication-selective oncolytic adenovirus and human telomerase reverse transcriptase/prostate-specific antigen (125I-RSOAds-hTERT/PSA) oncolytic adenovirus marker and investigated the effects of different labeling conditions. This study also explored the possible mechanism whereby 125I-RSOAds-hTERT/PSA inhibited the proliferation of prostate cancer cells.

Methods: N-bromosuccinimide (NBS) was used as an oxidant for 125I labeling, and various concentrations of oncolytic viruses and NBS were prepared to determine the optimal conditions for labeling. The effects of the

amount of 125I, reaction time, pH, and reaction volume on the labeling rate of the 125I-RSOAds-hTERT/PSA oncolytic adenovirus marker were measured. Radioactive oncolytic adenoviruses were isolated and purified by column chromatography; the radiochemical purities of the 125I-RSOAds-hTERT/PSA marker at different times were detected by paper chromatography. After the addition of radioactive iodine-labeled prostate cancer-specific oncolytic adenoviruses to prostate cancer cells, changes in the inhibitory rate were measured by methylthiazolyldiphenyl-tetrazolium bromide (MTT) assays.

Results: The radiochemical purity of the 125I-RSOAds-hTERT/PSA marker was >95%, and the marker was stable (93–94%) after storage at 4 ℃ for 7 days. The optimal conditions were 0.5 μL of 125I (about 0.2 mCi, 7.4 MBq), 25 μg of NBS, 100 μL of 8×10^9 viral protein (VP)/mL 125I-RSOAds-hTERT/PSA virus solution, 3 min of reaction time, pH 7.5, and 120 μL PBS. Radioactive iodine-labeled prostate cancer-specific oncolytic adenoviruses inhibited the proliferation of prostate cancer cells significantly.

Conclusions: Radioactive 125I labeling of the hTERT/PSA dual-regulated prostate cancer-specific oncolytic adenovirus is feasible, and the radiochemical purity of the marker was stable under defined conditions. Radioactive iodine-labeled prostate cancer-specific replication-selective oncolytic adenoviruses significantly inhibited prostate cell growth.

Keywords: Prostate tumor; selective oncolytic adenoviruses; radioactive 125I; inhibitory effects

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AB054. The role of urine ErbB3 protein in early diagnosis and prognosis evaluation of renal cell carcinoma

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Background: To study the expression of ErbB3 protein in renal cell carcinoma patients' urine and to explore the diagnostic value of ErbB3 protein in renal cell carcinoma.

Methods: (I) We collected 42 renal cell carcinoma patients' urine (including 31 clear cell renal cell carcinoma patients, 4 chromophobe renal carcinoma patients, 3 papillary cell renal carcinoma patients, 2 MTT renal carcinoma patients, 1 sarcomatoid carcinoma patient and 1 neurogenic renal carcinoma patient), 19 urinary calculus patients' urine, 40 urothelium carcinoma patients' urine, 33 prostate cancer patients' urine, 17 benign prostate hyperplasia patients' urine and 50 normal people's urine as control. ELISA was used to test the expression of ErbB3 protein in urine of different diseases. (II) We used SPSS 21.0 to analyze ErbB3 protein in urine of different diseases. Then we established the ROC curve of which diagnosing renal carcinoma and clear cell renal carcinoma by ErbB3 protein, respectively. Also, we analyzed the relation between ErbB3 protein in urine and the patients' BMI, creatinine, tumor diameter and underlying diseases such as hypertension and hyperglycemia.

Results: The content of ErbB3 protein was 18.9±26.4 pg/mL in renal cell carcinoma group, 17.8±26.6 pg/mL in clear cell renal carcinoma group, 3.1±37.4 pg/mL in urinary calculus group, 335.3±702.4 pg/mL in urothelium carcinoma group, 13.7±15.6 pg/mL in prostate cancer group, 40.4±52.4 pg/mL in BPH group and 59.0±54.7 pg/mL in normal group, respectively. The expression of ErbB3 protein in renal cell carcinoma group and clear cell renal cell carcinoma group was significantly lower than normal group($P<0.001$). Comparing with normal group, ErbB3 protein of urothelium carcinoma group has a higher expression and prostate cancer group has a lower expression on the contrary. The contents of ErbB3 protein in urinary calculus group and BPH group had no significantly differences with

