

animal study. Age-matched male SCID mice, at 6–8 weeks old, were used in assays for tumor growth and metastasis in an orthotopic graft model. Western blot analysis, reverse-transcriptase polymerase chain reaction (RT-PCR) and Chromatin immunoprecipitation (ChIP) analysis were used for check-up.

Results: Osthole suppress the migratory/invasive abilities of prostate cancer cells in wound-closure and transwell invasion assay and metastatic potential in prostate cancer xenograft model. Osthole suppresses the snail-induced EMT in prostate cancer cells and animal model. Mechanistic investigations revealed a signal cascade, namely, osthole inhibiting TGF- β →Akt→MAPKs→snail, in which osthole reduced Snail-DNA-binding activity and upregulated E-cadherin expression and subsequently blocked EMT progression.

Conclusions: We suggest that osthole inhibits metastasis via transcriptional regulation of E-cad by respectively altering Akt/MAPK/Snail pathways, which was initiated by inhibition of TGF- β productin. These results may warrant clinical trials of osthole in AIPC.

Podium-2 other

PD2-1:

BOTH OF THE NEUROPROTECTIVE AND TISSUE-PROTECTIVE EFFECTS OF PLATELET-RICH PLASMA ON ERECTILE FUNCTION IN BILATERAL CAVERNOUS NERVE INJURY RAT MODEL

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Purpose: The purpose of the present study was to determine the platelet rich plasma (PRP) action target that mediates its effect on erectile function (EF) recovery in the bilateral cavernous nerve crush (BCNC) injury rat model.

Materials and Methods: 52 rats were randomly divided into two equal groups: intracavernosal injection (IC) of saline after BCNC (group 1) and IC injection of PRP after BCNC (group 2). Five animals in each group were euthanized at 3 and 7 day (d) post-injection, and the tissues were harvested to conduct transmission electron microscopy (TEM) and histological assays in the penis, cavernous nerve (CN), and major pelvic ganglion (MPG). Eight animals in each group were used to determine the recovery of EF at 14 and 28 d post-injury, after which the penis, CN, and MPG tissues were harvested to conduct TEM and histological assays.

Results: Intracavernosal injections of PRP increased all erectile function parameters at 28 d ($p < 0.05$) but not 14 d ($p = 0.55$) post-injury. PRP injections simultaneously prevented the loss of neural nitric oxide synthase (nNOS)-positive neurons ($p < 0.05$) and nerve fibers ($p < 0.05$) in the MPG and CN compared with group 1, respectively, which accelerated the regeneration of myelinated axons of the CN, reduced apoptosis, and enhanced the proliferation of the corporal smooth muscle cells at an earlier stage.

Conclusions: The results of this study suggest that the application of PRP for erectile dysfunction caused by BCNC-related axonotmesis was beneficial to restore EF via both neuroprotective and tissue-protective effects.

PD2-2:

PATIENT CHARACTERISTICS FOR DIFFERENT THERAPEUTIC STRATEGIES IN THE MANAGEMENT OF KETAMINE CYSTITIS

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Purpose: This study analyzed the ketamine cystitis(KC) patient characteristics between who received conservative management and augmentation enterocystoplasty (AE).

Materials and Methods: A total of 53 patients with chronic ketamine abuse and lower urinary tract symptoms visiting urological clinic of a tertiary teaching hospital in Eastern Taiwan were included in this study. All of the patients have been initially treated conservatively but failed. They were admitted for detailed urological examinations including cystoscopic hydrodistention and urinary tract image study. Patients were classified according to their maximal bladder capacity (MBC). The patients with extremely small MBC (<100ml) with or without upper urinary tract damage and very small MBC with upper urinary tract damage were recommended to receive AE. The other patients were recommended to receive symptomatic treatment. The patient characteristics and bladder condition are compared between patients with AE and conservative treatment. Treatment outcome was also assessed in these two groups.

Results: Among the participants, 28 patients underwent AE and 25 were managed with conservative treatment. The only significant difference between groups was more patients with urgency urinary incontinence (UUI) underwent AE. Patients underwent AE had significantly smaller MBC, thicker bladder wall, and higher incidence of vesicoureteral reflux. Significantly more patients underwent AE reported a good outcome. Most of the patients received conservative treatment only had a fair result.

Conclusions: KC patients who already developed a contracted bladder with extremely small bladder capacity (<100ml) or very small capacity (100-300ml) with irreversible urinary tract change, partial cystectomy and AE seems necessary for early restoration of a normal lower urinary tract function. The treatment outcome of AE is better than patients with conservative treatment.

PD2-3:

PROSPECTIVE EVALUATION OF PELVIC FLOOR MUSCLE TRAINING AND MALE SLING FOR MALE POSTPROSTATECTOMY STRESS URINARY INCONTINENCE

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Purpose: Persistent stress urinary incontinence (SUI) occurs approximate 10% ~30% patients after radical prostatectomy (RP). The aim of the study was to evaluate the effectiveness and safety of the pelvic floor muscle training (PFMT) and retrograde urethral transobturator sling for the treatment of male SUI.

Materials and Methods: This study documents a single-center prospective evaluation of the outcome of 26 patients with SUI following RP in whom received PFMT and male sling between 2012 Feb and 2015 Feb. All patients were comprehensively evaluated pre-training, post-training, preoperatively and after 6 months regarding daily pad use, ULCA male incontinence questionnaires, patients' satisfaction, post-voiding residual urine and complications.

Results: The mean patients' age was 69.3 ± 7.7 years (range 63–82) and the mean pad use was 3.7 ± 2.6 per day (range 1–7). Baseline urodynamic study showed mean Qmax was 12.8 ± 8.0 mL, voided volume was 161 ± 126 mL, PVR was 19 ± 30 mL, ALPP was 48.9 ± 34.2 cmH₂O and CLPP was 68.6 ± 25.1 cmH₂O. After 12 courses of pelvic floor retraining in 3 months, The use of daily pad was significantly decreased from 3.7 ± 2.6 to 2.4 ± 1.5 , $p = 0.02$. However the UCLA score was not significantly changed (82.8 ± 75.1 to 70.2 ± 34 , $p = 0.25$). The patients' satisfactory rate was 40%. Of them, 12 patients received transobturator male sling after failed conservative treatment. Retrograde urethral pressure profile was measured with 60cmH₂O leakage point pressure setting after placing sling. Compared with preoperative status, the use of daily pad was significantly decreased from 4.7 ± 2.3 to 0.5 ± 1.0 , $p < 0.001$. The UCLA score was significantly increased from 62.0 ± 40.3 to 248 ± 177 , $p < 0.001$. The overall patients' satisfactory rate was 91.7%. One patient suffered from temporary acute urinary retention and one patient had perineal skin erosion.

Conclusions: Conservative treatment has limited effects for male SUI after RP. Mail sling is an effective and safe procedure for treatment of male SUI during the short-term followup.