While using this rolling method, mesh placement could be easier and more operative time is also reduced. The mesh could be placed more flat and neat than before.

Conclusion: Laparoscopic total extra-peritoneal repair (TEP) is more comfortable for the patient than traditional open method. However, TEP might have some disadvantages, such as increased cost, lengthier operation, stepper learning curve, and most importantly, results in higher recurrence and complication rates early in a surgeon’s experience.

While using this rolling method, mesh placement could be easier and more efficient than traditional method. It is easy learning and may shorten the learning curve of mesh placement. Since our procedure was easily performed, we believe it is worth imitating for urologists who just begin to learn the skill of TEP.

**Andrology**

**NDP074:**

**HERB-DRUG INTERACTION OF EPIMEDIUM EXTRACT ON THE PHARMACOKINETIC OF DAPOXETINE IN RAT**

Thomas Y. Hsueh,1,2,6 Jing-Kai Ho,3 Lie-Chwen Lin4, Allen W. Chiu,1,6

Chinese medicine, Ministry of Health and Welfare, Taipei, Taiwan; 1 Institute of Traditional Medicine, School of Medicine, National Yang-Ming University, Taipei, Taiwan; 2 Institute of Pharmacology, School of Medicine, National Yang-Ming University, Taipei, Taiwan; 3 National Research Institute of Chinese medicine, Ministry of Health and Welfare, Taipei, Taiwan; 4 Institute of Microbiology and Immunology, National Yang-Ming University, Taipei, Taiwan; 5 Department of Urology, School of Medicine, National Yang-Ming University, Taipei, Taiwan; 6 School of Pharmacy, College of Pharmacy, Kaohsiung Medical University, Kaohsiung, Taiwan.

**Purpose:** The aim of study is to develop a high performance liquid chromatography-tandem mass spectrometry (LC-MS/MS) method to investigate the pharmacokinetic interaction of Epimedium extract on the dapoxetine in rats.

**Materials and Methods:** Experimental rats were divided into the following four parallel groups: (1) dapoxetine alone (10 mg/kg, i.v.); (2) oral administration of Epimedium extract (2 g/kg) for 3 consecutive days and on the fourth day dapoxetine was administered (10 mg/kg, i.v.); (3) dapoxetine alone (10 mg/kg, p.o.); (4) oral administration of Epimedium extract (2 g/kg) for 3 consecutive days and on the fourth day dapoxetine was administered (10 mg/kg, p.o.). The dapoxetine and internal standard (nylinidrin) were determined by a high-performance liquid chromatography-tandem mass spectrometry (HPLC-MS/MS) and separated by a C18 column (100 x 2.1 mm, 1.7 μm). The data was obtained in positive electrospray mode.

**Results:** The calibration curves of dapoxetine were acquired over a concentration range from 1 to 500 ng/mL with the R^2^ > 0.999. The mean matrix effects and extraction recoveries of dapoxetine at three different concentrations (1, 10, 500 ng/mL) ranged from 107.3 to 110.9% and from 25.5 to 28.2% respectively. The interday and intraday relative standard deviation were both <6% while the bias were both <14%. The oral bioavailability of dapoxetine was about 75% in rat.

**Conclusion:** The pharmacokinetic results demonstrated that pretreated with/without Epimedium extract for three consecutive days did not significantly alter the pharmacokinetics of dapoxetine in rat.

**NDP078:**

**SIGNIFICANT PREDICTIVE FACTORS FOR SUBFERTILITY IN MEN WITH SUBCLINICAL VARICOCELE**

Saint Shiou-Sheng Chen,1,2

Department of Urology, National Yang-Ming University School of Medicine, Taiwan; 1 Department of Urology, National Yang-Ming University School of Medicine, Taiwan; 2 Division of Urology, Taipei City Hospital HepingFuyou Branch, Taipei, Taiwan.

**Purpose:** To determine the useful parameters for predicting subfertility in patients with subclinical varicocele (SV) by a retrospective study.

**Materials and Methods:** Between June 2001 and February 2011, 150 men with SV, and 17 age-matched men without SV were recruited. They were divided into three groups: Group 1 with subfertile patients (n = 15), Group 2 with fertile patients (n = 135), Group 3 with control patients (n = 17), respectively. The parameters for evaluation and comparison were included age, body mass index, semen analysis and PH, testicular volume, scrotal temperature, resistive index (RI), pulsatility index (PI) and peak retrograde flow (PRF) by color Doppler ultrasound.

**Results:** Of 150 patients with SV, 120 (80%) were left; 22 (14.7%) bilateral and 8 (5.3%) right. Subfertile patients (Groups 1) with SV had significantly lower testicular volume, higher scrotal temperature, RI, PI and PRF than fertile men with subclinical varicocele (Groups 2) and control group (Groups 3). Elderly men (>50 years, n = 30) with SV had a significantly higher incidence of bilateral SV (9/30; 30% vs. 11/120; 9.2%) than young men with SV. No significant difference was noticed for age, body mass index and semen PH among the patients in three groups.

**Conclusion:** Patients with SV may suffer from subfertility regardless of age. More attention should be given to SV patients with RI>0.55ml/sec, PI>0.99 ml/sec, total testicular volume <27 cc, scrotal temperature> 34.94°C and PRF >29 cm per second.

**NDP079:**

**INCREASED RISK OF ERECTILE DYSFUNCTION IN PATIENTS WITH OBSTRUCTIVE SLEEP APNEA: A NATIONWIDE STUDY**

Chi-Cheng Lu, Wen-Chou Fan. Division of Urology, Department of Surgery, Chi Mei Medical Center, Liouying, Tainan, Taiwan.

**Purpose:** Obstructive sleep apnea (OSA) syndrome is a disease with recurring episodes of apnea or hypopnea from total or partial pharyngeal collapse during sleep. This study investigates the possible association between OSA and erectile dysfunction (ED).

**Materials and Methods:** A retrospective cohort study was conducted with 2 study groups: an OSA group and a matched non-OSA control group. The nationwide database from the National Health Insurance (NHID) was used. OSA was defined in a male patient if he had at least two outpatient service claims with the codes of OSA (ICD-9-CM code 780.51, 780.53, 780.57, 327.23) at any hospital or local medical clinic and received a polysomnography test or had a single hospitalization for OSA among the 4 claims diagnosis codes. In Taiwan, ED is diagnosed based on the results of a self-administered International index of Erectile Dysfunction-5 questionnaire. ED (ICD-9 coded as 607.84) was identified only through a diagnosis made during admission or by a specialist during 3 hospital visits. Any diagnosed ED before OSA was excluded. All individuals in the NHID were encrypted for confidentiality.

**Results:** A total of 3831 OSA patients and 15324 age, gender, and index date matched non-OSA patients were followed at least 10 years. Approximately 65% of the group was younger than 50 years old, 24% was 50 to 65 years old, and 11% was older than 65 years old. Patients with OSA had a higher prevalence of ED.

**Conclusion:** The possible association between OSA and ED is shown from this nationwide study. Awareness of OSA and risk of developing ED is suggested for the physicians.

**NDP080:**

**IDENTIFICATION OF MGCRAPGAP-INTERACTED SUBSTRATES DURING MAMMALIAN SPHIOGENESIS**

Chung-Hsin Yeh,1,2, Ya-Yun Wan,3 Ying-Yu Wu1, Han-Sun Chiang,2,3, Ying-Hung Lin1,2,6

Division of Urology, Shin Kong Wu Ho-Su Memorial Hospital, Taipei, Taiwan; 2 School of Medicine, Fu-Jen Catholic University, New Taipei City, Taiwan; 3 Graduate Institute of Basic Medicine, Fu-Jen Catholic University, Taiwan.

**Purpose:** It is estimated that 10–15% of couples are infertile and male factors account for about half of the cases. Approximately 25% of the causes of male infertility are still unknown and the majority of infertile cases have defects in spermatogenesis. But large of those spermatogenesis are still unknown. We have previously identified novel tests-specific genes using...