

success rate. In the multivariate logistic regression of the renal stone group, stone width is the independent factor which affects the success rate. In univariate analysis of the ureteral stone group, only the stone size showed statistically significant. In the multivariate logistic regression of the stone length and stone width of the ureteral stone, only stone length is the independent factor.

Conclusion: Stone size is the most important factors influencing the outcome of ESWL both in renal stone and ureteral stone. In renal stone group, the stone width is the major character to affect post-ESWL stone free rate and in the ureteral stone group, the stone length is the major character.

NDP096:

COMPARATIVE STUDY OF PERCUTANEOUS NEPHROLITHOTOMY VERSUS OPEN STONE SURGERY FOR MANAGEMENT OF PATIENTS WITH LARGE STAGHORN CALCULI

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Purpose: Advances in shock wave lithotripsy and endourological procedures have further limited the need for open surgery in the treatment of renal stones. We reviewed our experience of percutaneous nephrolithotomy (PNL)-based therapy with open stone surgery (OSS) to determine the clinical outcomes of these therapeutic modalities.

Materials and methods: This retrospective study was conducted at Mackay Memorial Hospitals (Taipei and Tamsui), Taiwan. Hospital and office charts, operative records, and pertinent radiographic studies of all patients undergoing OSS (11 patients) and PNL (61 patients) for the treatment of large staghorn calculi from December 2007 through June 2013 were reviewed. Only patients with stones 10 cm² or greater were included. Patient characteristics, stone burden, indications, surgical outcomes, and differences between the two procedures were compared and analyzed. Stone-clearance status was confirmed with postoperative kidney, ureter, bladder X-rays.

Results: There were no differences between the two groups in patient demographics, stone size, estimated blood loss and mean renal function level change. However, there were statistically significant differences between the groups in mean operative time (282.1 ± 54.5 [range: 187–340] vs. 156.6 ± 41.2 [range: 85–285] minutes), mean hospital stay (10.27 ± 1.79 [range: 8–14] vs. 6.18 ± 2.71 [range: 2–17] days), postoperative stone-clearance rate (97.5 vs. 76.1%) and number of procedures per patient (1.55 vs. 2.77).

Conclusion: In our experience, OSS should still be considered a valid and efficient treatment option for patients with complete staghorn calculi, although PNL is the standard treatment for most cases of renal stones.

NDP097:

THE USE AND THE PRESCRIPTION PATTERN OF TRADITIONAL CHINESE MEDICINE AMONG UROLITHIASIS PATIENTS IN TAIWAN: A POPULATION-BASED STUDY

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Purpose: Few studies have been published concerning the use of traditional Chinese medicine (TCM) for urolithiasis patients and the factors that are related to the use of TCM are not clear. This study investigates the pattern of TCM usage for urolithiasis patients in Taiwan and determines the most common Chinese herbal products used for urolithiasis. The results of this descriptive study pave the way for clinical trials, to evaluate the efficacy and safety of this strategy.

Materials and Methods: This study is a population-based study that analyzes one million samples, randomly selected from 22 million patients in the Taiwanese National Health Insurance Research Database between 1997 and 2008. To determine the key independent variables for the use of TCM for patients with urolithiasis, a series of demographic factors are used, including age, gender, region, the charge and the medical conditions: comorbidity, calculi location and medication. Multiple logistic regressions were conducted to evaluate the factors that correlated with CHP usage.

Results: A total of 82,551 newly diagnosed urolithiasis patients in the 12 years of data are used, 51,685 (62.6%) of whom use TCM and 30,866 (37.4%) of whom do not use TCM. A younger age, female gender, polypharmacy, multiple comorbidities and stone in the lower urinary tract results in a greater tendency to use TCM, after adjusting for demographic factors. Jia-Wei-Xiao-Yao-San and Ji-Sheng-Shen-Qi-Wan are the most frequently prescribed Chinese medicine formulae.

Conclusion: This is the first study to examine the use of and the prescription pattern for Traditional Chinese Medicine for urolithiasis patients, using a random, national, population-based sample. More than 62% of urolithiasis patients use TCM, and patients with polypharmacy, multiple comorbidities and stone in the ureter are more likely to use TCM. Highly frequently prescribed Chinese medicine formulae including Wu-Ling-San and Zhu-Ling-Tang were reported to prevent crystallization formation or relieve urolithiasis related symptoms.

NDP098:

A 30 MIN POST-CONTRAST KUB AFTER ENHANCED ABDOMINAL CT FOR PRESENTATION OF FORNICAL URINE LEAKAGE

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Purpose: Nontraumatic rupture of the urinary collecting system associated with perinephric or retroperitoneal extravasation of the urine is an unusual condition. Perforation can occur usually at the fornices and upper ureter. It may lead to several serious consequences including urinoma, abscess formation, urosepsis, infection, and subsequent irreversible renal impairment.

Materials and Methods: We report a case of a 63-year-old woman who presented at the emergency department of our institution with severe left lower quadrant abdominal pain. Due to symptomatology worsening and history with sigmoid diverticulum, complete laboratory evaluation was performed and the patient underwent abdominal contrast enhanced computed tomography (CT) evaluation which showed multiple sigmoid diverticulum without fat stranding and no contrast agent extravasation outside the excretory system with evidence of left upper ureteral calculi and fluid accumulated around the left Gerota's fascia region. A 30 min post-contrast KUB film after enhanced abdominal CT was taken as intravenous urogram (IVU), which showed contrast agent extravasation outside the excretory system without any evidence of ureteral calculi at basal acquisition.

Results: Ureterscopy with double-J stent placement was arranged and performed smoothly. Its removal was performed 8 weeks later.

Conclusion: This report present visualization of fornical urine leakage in post-contrast KUB after enhanced abdominal CT. Timely post-contrast KUB gets more clues in clinical differential diagnosis of acute abdomen.

NDP099:

THE RELATIONSHIP OF UROLITHIASIS AND MYOCARDIAL INFARCTION: A NHIRD-BASED STUDY

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Purpose: Urolithiasis is a common disease in modern society. Several studies had revealed that urolithiasis is associated with many systemic