Ascending cystourethrogram (ACU) with micturating cystourethrogram (MCU), pelvic and abdominal ultrasound, serum creatinine and urine analysis and culture were performed for all patients.

Statistical differences between groups were tested using Chi-square, Nonparametric Mann Whitney test and Friedman test. A p-value less than 0.05 was considered statistically significant.

RESULTS: 23 (72%) patients underwent bladder neck reconstruction (BNI), 19 (59%) underwent augmentation ileocystoplasty (AI), 5 (16%) underwent ureterovesical implantation (UVI), 22 (69%) of the patients underwent osteotomy, 9 (28%) patients were totally or partially continent, 3 patients (9%) underwent Mitrofanoff, 8 (25%) patients had a penopubic fistula.

18 patients (56%) had urinary tract infection, 24 (75%) patients showed no backpressure changes, 3 (9%) patients showed unilateral backpressure changes, 5 (16%) patients showed bilateral backpressure changes. ACU and MCU results showed 8 (25%) patients had no refluxing ureters, 15 (47%) patients showed unilateral reflux and 9 (28%) patients showed bilateral reflux. Mean serum creatinine level 0.71 ±0.22 mg/dl.

Presence of hydronephrosis was statistically significant correlated with less number of operations p.value.

Patients who did not perform AI showed statistically significance higher incidence of refluxing ureters p.value = 0.01.

Mitrofanoff procedure showed statistically significant better results regarding continence p.value = 0.001.

Age at first intervention, number of operations, AI, BNR did not show any statistically correlation with serum creatinine level or infection.

CONCLUSIONS: Upper urinary tract follow up is of utmost importance, augmentation ileocystoplasty and Mitrofanoff urinary diversion can be a quiet combined savior procedure for the upper urinary tract and an acceptable continence results.

Source of Funding: none

MP56-10
POST-OPERATIVE COMPLICATIONS OF SPINA BIFIDA PATIENTS UNDERGOING UROLOGICAL EXPLORATORY LAPAROTOMIES- A MULTI-INSTITUTIONAL ANALYSIS

Christopher J. Loftus*, Cleveland, OH; David C. Moore, Joshua A. Cohn, Douglas F. Milm, Roger R. Dmochowski, Nashville, TN; Dan Wilby, Portsmouth, United Kingdom; Dan Wood, London, United Kingdom; Melissa R. Kaufman, Nashville, TN; Hadley M. Wood, Cleveland, OH

INTRODUCTION AND OBJECTIVES: Adult spina bifida (SB) patients often carry multiple comorbidities, decreased functional status and extensive surgical histories predisposing them to complications after invasive surgeries. The objective of this study was to describe and classify the post-surgical complications in adult patients with SB undergoing exploratory laparotomies for treatment of urological disease.

METHODS: Fifty-nine patients with SB underwent abdominal exploratory laparotomy for urological indications between 2002 and 2014 at 3 separate institutions. Retrospective analysis of medical records was conducted to characterize post-surgical complications using the Clavien-Dindo Classification of Surgical Complications on a scale of 0-5.

RESULTS: The complication rate for these patients was 91.5% (Figure 1). A complication grade of at least class II was recorded in 71.2%, class III in 42.4%, and class IV in 16.9%. There was 1 death. Mean age (34.3±11.5), BMI based on weight and linear height (30.3±8.7), ASA class (2.8±0.5), and male gender (62%) were not associated with grade complication. Average length of hospital stay was 9.8±4.1 days. Mean number of complications per patient was 3.0. The most common complications were ileus (37%), urinary tract infection (27%) and wound infection (25%). (Table 1) The overall readmission rate was 42%.

CONCLUSIONS: These patients demonstrated a large range of complications after abdominal exploratory laparotomy and most patients developed at least a class I complication, suggesting that these patients represent a unique high-risk population. Multisystem disease, cognitive, and socio-behavioral factors are likely to contribute to observed outcomes. There may be opportunity to improve these outcomes with focused investigation of systemic and physiological challenges with perioperative care for this population. Surgeons caring for these patients may be well-served to counsel patients regarding prolonged post-operative convalescence and increased risk of complication.

Source of Funding: none