



BACKGROUND

- Complication rates following cystectomy range from 40-80% with 75% of complications being related to the urinary diversion.
- Reported complications following continent cutaneous urinary reservoir creation have been reported to be higher than either ileal conduit or orthotopic neobladder creation.
- We sought out to describe the most recent 7 year experience with 137 consecutive Indiana Pouch patients at a single institution.
- Our goal was to provide updated data on early complications with this type of urinary diversion during the first postoperative year.

MATERIALS and METHODS

- Our prospectively maintained bladder cancer database was queried to identify all patients who underwent cystectomy who subsequently underwent an Indiana pouch continent urinary reservoir creation between 2012 -2018.
- Perioperative, intraoperative, and postoperative data were collected.
- The primary outcome was complication requiring readmission occurring during the first postoperative year.
- Secondary outcomes included rates of reoperation, pouch stones, febrile urinary tract infections, and overall mortality.

TABLE 1: DEMOGRAPHICS AND BACKGROUND

Table 1: Demographics and Background Data	Total (n=137)
Age (yrs) at CUR (median, IQR)	61 (55-69)
BMI (median, IQR)	28.2 (24.8-35.2)
Tobacco Use (n,%)	
Current	25 (18.2%)
Former	54 (39.4)
Never	49 (35.8%)
Unknown	9 (6.6%)
Alcohol Use (n,%)	
daily/weekly	41(29.9%)
monthly	29 (21.2%)
never	59 (43.1%)
former	2 (1.5%)
unknown	6 (4.4%)
COPD (n,%)	8/137 (5.8%)
Diabetes (n,%)	17/137 (12.4%)
Hypertension (n,%)	52/137 (38.0%)
Creatinine at time of TUR (median, IQR)	1.0 (0.85-1.2)
Prior Pelvic Radiation (n,%)	14/137 (10.2%)
NACT use (n,%)	36/137 (26.3%)
Indication for Cystectomy (n,%)	
BCG Refractory BC	43/137 (31.4%)
MIBC	66/137 (48.2%)
Variant Histology	7/137 (5.1%)
Other	21/137 (15.3%)

TABLE 2: PROCEDURE

Table 2: Procedure	Total (n=137)
Time of surg(minutes) (median,IQR)	420 (326-482)
Estimated Blood Loss (mL)(median,IQR)	500 (300-700)
Lymphadenectomy performed	
Extended	77/137 (56.2%)
Standard	30/137 (21.9%)
None	30/137 (21.9%)
Intraoperative Complications	3/137 (2.2%)
Length of Stay (days) (median,IQR)	8 (6-11)

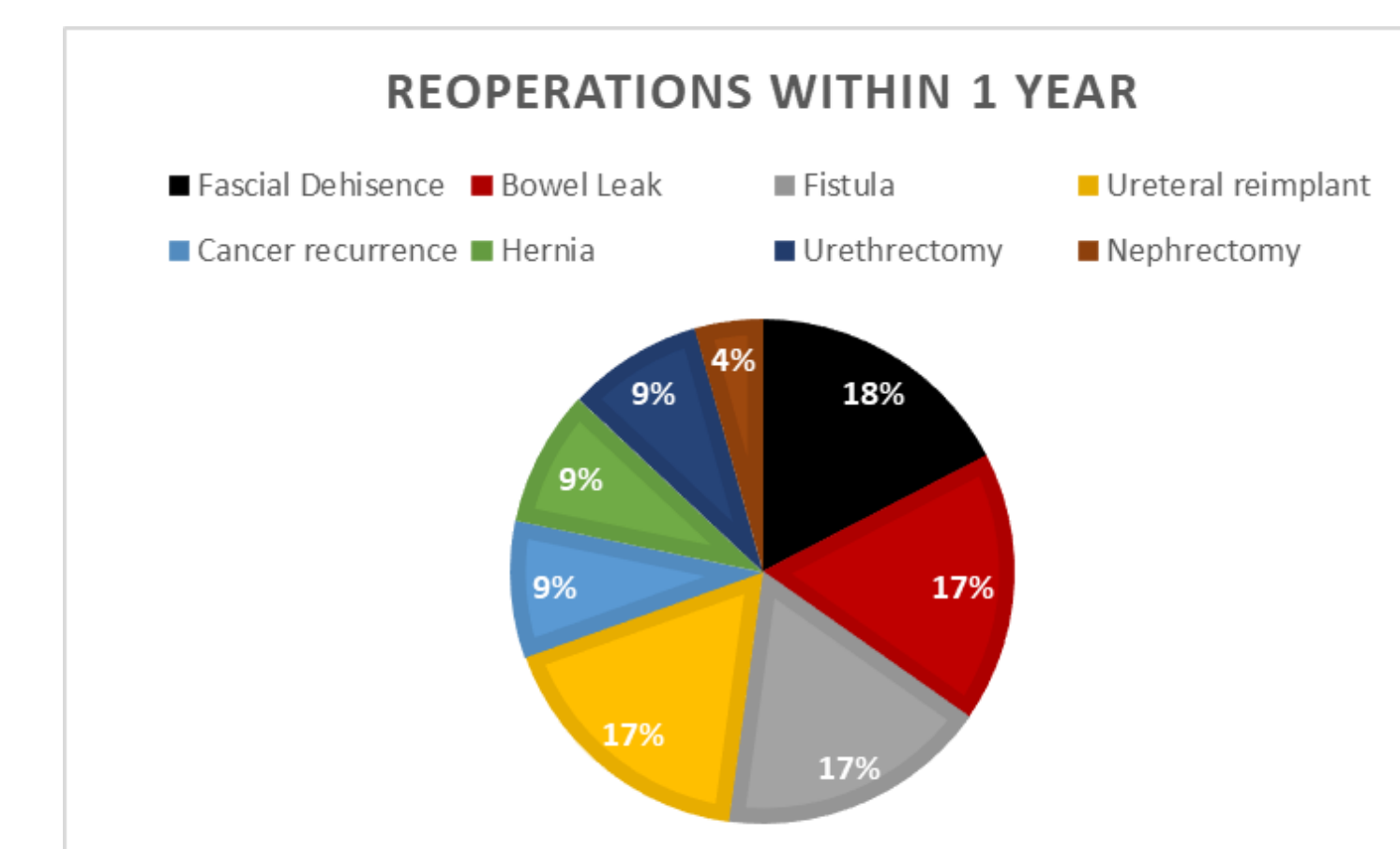
RESULTS

- 137 patient during the time period underwent cystectomy with Indiana pouch creation.
- 93% were radical cystectomies.
- Median (IQR) LOS was 8 days (6-11 days)
- Overall 54 (39%) patients suffered a complication during the first postoperative year.
- Intraoperative complications occurred in 3 (2.3%) patients.
- 41 (30%) of patients required readmission for various reasons including sepsis from urinary source, leak, wound infection, need for reoperation, and enterocutaneous fistula management.
- 15% of patients were treated for recurrent uncomplicated UTIs while 8% developed complicated UTIs requiring admission for intravenous antibiotics.
- Only 2 (1.5%) patients developed pouch or renal stones and 5 (3.6%) patients required stomal revisions.
- 23 patients (17%) required reoperation for multiple reasons including bowel perforations/leak, enterocutaneous fistula takedowns, ureteral strictures, and completion pelvic exenterations/urethrectomies.
- While the Cr trended up over the first year from the time of discharge, it was not significantly different from the time of TUR.
- The overall one-year mortality rate for all causes was 3.7%.

TABLE 3: OUTCOMES

Table 3: Outcomes	Total (n=137)
Creatinine (median,IQR)	
Discharge	0.8 (0.7-1.0)
3 months	0.9 (0.8-1.1)
6 months	1.0 (0.8-1.2)
1 year	1.1 (0.9-1.2)
Readmissions w/in 1 yr (n,%)	41/137 (29.9%)
Reoperations total	50/137 (36.5%)
Reoperations w/in 1 year	23/137 (16.8%)
Uncomplicated UTI w/in 1 year	21/137 (15.3%)
Complicated UTI w/in 1 year	11/137 (8.0%)
Pouch stones overall	8/137 (5.8%)
Pouch stones w/in 1 year	2/137 (1.5%)
Stomal revisions overall	25/137 (18.2%)
Stomal revisions w/in 1 year	5/137 (3.6%)

FIGURE 1



CONCLUSIONS

- Patients undergoing cystectomy with Indiana pouch urinary reservoir creation appear to have similar complications rates overall when compared with reported rates among ileal conduit or orthotopic neobladder.