Title

PD28-04 INSTITUTIONAL GUIDELINES ARE EFFECTIVE IN REDUCING POST-OPERATIVE OPIOID PRESCRIPTIONS FOLLOWING UROLOGIC SURGERY: RESULTS FROM THE AMERICAN UROLOGIC ASSOCIATION 2018 CENSUS

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RESULTS: 45 patients had newly diagnosed bladder tumours during that seven-month period. There was a male preponderance overall, with a median age of 73 in the low-risk group, 79.5 in the intermediate-risk and 71.5 in the high-risk group. 60% of patients were inadequately risk-stratified at the time of their index FC. The mean interval from FC to TURBT was 30 days in the low-risk group, 26 in the intermediate-risk group and 31 days in the high-risk group.

CONCLUSIONS: A significant proportion of newly diagnosed bladder cancer patients were inadequately risk-stratified at FC. Moreover, patients with HBC are waiting just as long if not longer than patients with LBC disease for their TURBT. By designing and implementing a simple risk stratification tool to be used at the Haematuria Clinic we have prioritised those with suspected high-risk disease to the top of the waiting list in order to avoid delays and optimise their care. We currently await the outcome of a re-audit of our practice.

Source of Funding: N/A

PD28-03

PREOPERATIVE TELEHEALTH EVALUATION ALONE PRIOR TO UROLOGIC SURGERY: SAFETY, FEASIBILITY, SURGICAL OUTCOMES

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INTRODUCTION AND OBJECTIVE: The COVID-19 pandemic prompted a transition to telehealth in Urology. No study has analyzed urologic surgical outcomes among patients evaluated preoperatively via telehealth only. We compared surgical outcomes between patients who had telehealth only versus in-person preoperative visits prior to urologic surgery.

METHODS: Retrospective single center review of all urologic surgeries from April-December 2020. Cases were classified based on whether patients visited preoperatively in person or via telehealth. Major exclusion criteria included having both preoperative in person and telehealth visits. Cases were stratified into four categories for analysis based on CPT coding: Upper Tract Endoscopic (UTE), Lower Tract Endoscopic (LTE), Major Abdominal (MA) (Open/Laparoscopic/Robotic), and Lower Tract Reconstructive (LTR). Covariates of interest included age, sex, race, ASA status, and distance from hospital. Outcomes included need for blood products, complications, operative time, and length of stay (LOS). Complications were identified using reported morbidity and mortality data and organized based on the Clavien-Dindo scale; scores >2 were considered major complications.

RESULTS: Table 1 displays demographic and outcomes of interest. 1,405 patients met inclusion criteria with 101 visits being telehealth only. There was no difference in sex, race, and ASA status. Telehealth patients were younger and lived farther away from the hospital and more likely to undergo UTE or MA surgeries compared to in person visits. There was no difference in perioperative complications or transfusion events between groups. Stratified by procedure type, there was no difference operative time or LOS between cohorts for UTE, MA, or LTE surgeries. LTR surgeries were associated with shorter operative times for telehealth patients, but no difference in LOS.

CONCLUSIONS: Patients seen preoperatively by telehealth alone experienced no difference in complications or length of stay when undergoing urologic surgery, including major abdominal surgery. Despite limitations in selection bias and its retrospective nature, our study suggests that telehealth based preoperative evaluation is feasible and safe in appropriately selected patients undergoing urologic surgery.

Variable	All (*n* = 1,405)	In Person Only (*n* = 1304)	Telehealth Only (*n* = 101)	P-Value
Age				0.01
Mean (SD)	63 (14)	63 (14)	60 (14)	
Median (IQR)	66 (56- 73)	66 (57- 73)	62 (53- 71)	
Sex, *n* (%)				0.8
Male	1,026 (73.0)	951 (72.9)	75 (74.3)	
Race, *n* (%)				0.2
White	1,016 (72.3)	947 (72.6)	69 (68.3)	
Black	130 (9.3)	123 (9.4)	7 (6.9)	
Other	259 (18.4)	234 (18.0)	25 (24.8)	
ASA Class, *n* (%)				1
Class I	68 (4.8)	63 (4.8)	5 (5.0)	
Class II	663 (47.2)	616 (47.2)	47 (46.5)	
Class III	640 (45.6)	593 (45.5)	47 (46.5)	
Class IV	34 (2.4)	32 (2.5)	2 (2.0)	
Distance from Hospital, *n* (%)				< 0.01
0-25 Miles	595 (42.4)	562 (43.0)	33 (32.7)	
25-50 Miles	394 (28.0)	371 (28.5)	23 (22.8)	
50+ Miles	416 (29.6)	371 (28.5)	45 (44.5)	
Procedure Type, *n* (%)				< 0.01
Upper Tract Endoscopic	133 (9.5)	115 (8.9)	18 (17.8)	
Lower Tract Endoscopic	358 (25.6)	344 (26.5)	14 (13.9)	
Major Abdominal Robotic/Laparoscopic/Open	507 (36.3)	453 (34.9)	54 (53.5)	
Lower GU Tract Reconstructive	400 (28.6)	385 (29.7)	15 (14.9)	
Complications, *n* (%)				0.5
Minor Complications, *n* (%)	14 (1.0)	14 (1.1)	0 (0.0)	
Major Complications, *n* (%)	18 (1.3)	16 (1.20	2 (2.0)	
Blood Products Used, *n* (%)	32 (2.3)	28 (2.2)	4 (4.0)	0.3
Upper Tract Endoscopic Operative Time (minutes)				0.7
Mean (SD)	100 (56)	100 (57)	102 (52)	
Median (IQR)	91 (57- 132)	87 (57- 132)	102 (67- 135)	
Lower Tract Endoscopic Operative Time (minutes)				0.9
Mean (SD)	43 (29)	43 (30)	39 (21)	
Median (IQR)	35 (21- 58)	36 (21- 58)	34 (23- 45)	
Major Abdominal Operative Time (minutes)				0.9
Mean (SD)	197 (77)	197 (77)	196 (73)	
Median (IQR)	180 (146- 230)	182 (144- 232)	175 (154- 221)	
Lower GU Tract Reconstructive Operative Time (minutes)				0.03
Mean (SD)	91 (55)	92 (55)	65 (44)	
Median (IQR)	78 (47- 116)	82 (48- 117)	52 (38- 89)	
Upper Tract Endoscopic Length of Stay (Days)				0.4
Mean (SD)	0.8 (1.5)	0.8 (1.6)	0.6 (1.3)	
Median (IQR)	0 (0- 1)	0 (0- 1)	0 (0- 1)	
Lower Tract Endoscopic Length of Stay (Days)				0.3
Mean (SD)	0.6 (1.5)	0.6 (1.6)	0.2 (0.4)	
Median (IQR)	0 (0- 1)	0 (0- 1)	0 (0- 1)	
Major Abdominal Length of Stay (Days)				0.5
Mean (SD)	2.3 (2.9)	2.3 (2.9)	2.6 (3.4)	
Median (IQR)	1 (1- 2)	1 (1- 3)	1 (1- 2)	
Lower GU Tract Reconstructive Length of Stay (Days)				0.2
Mean (SD)	0.6 (2.1)	0.6 (2.1)	0.2 (0.4)	
Median (IQR)	0 (0- 1)	0 (0- 1)	0 (0- 1)	

Source of Funding: None

PD28-04

INSTITUTIONAL GUIDELINES ARE EFFECTIVE IN REDUCING POST-OPERATIVE OPIOID PRESCRIPTIONS FOLLOWING UROLOGIC SURGERY: RESULTS FROM THE AMERICAN UROLOGIC ASSOCIATION 2018 CENSUS

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INTRODUCTION AND OBJECTIVE: Opioid related mortality is a leading cause of death in the United States (US). Post-operative prescriptions provide a significant source of opioids in the community and have contributed to the surge. We examined census data from the American Urologic Association (AUA) to assess provider and practice characteristics that drive prescription behavior.

METHODS: The 2018 AUA Census is a specialty-specific, representative survey distributed to practicing urologists throughout the US. Stratified, weighted analysis using 1,157 census samples was performed to represent 12,660 urologists who practiced in the US in 2018. We compared urologists according to their opioid prescription patterns to evaluate factors and motivation behind opioids use in the post-operative setting.

RESULTS: Overall, 11,205 (88.5%) urologists prescribe opioids in the post-operative setting. The presence of procedure-specific prescribing guidelines was associated with a greater tendency to prescribe $\leq$10 pills and lesser tendency to prescribe 11-49 and $\geq$ 50 tablets following open abdominal surgery ($p=0.0034$), laparoscopic surgery ($p<0.0001$), scrotal surgery ($p=0.0002$), and endoscopic surgery ($p=0.0002$). The presence of practice guidelines was more likely to lead to the provider decreasing opioid prescriptions over a 3-year period (absolute increase 13%), whereas an unchanged prescription practice over time was twice as likely in the absence of such guidelines ($p=0.0168$). For providers, basing current prescriptions on what was given to prior patients was reported by 85% of urologists and was more likely to result in an unchanged amount of prescriptions over time (29.2% vs 13.3%, $p=0.0073$). Motivations to avoid patient phone calls were reported by 23.8% of

urologists and were more likely to increase the opioids provided (3.2% vs 0.1%, p<0.0001).

CONCLUSIONS: Practitioners who endorsed using institutional guidelines prescribed fewer opioids following all types of surgery and were more likely to decrease their prescription behavior over time. This data supports continued efforts to provide urologists with more evidence-based guidance on best practice opioid prescribing in the future.

Source of Funding: None

PD28-05

HARNESSING CHOICE ARCHITECTURE IN UROLOGIC PRACTICE: IMPLEMENTATION OF AN OPIOID-SPARING PROTOCOL GROUNDED IN BEHAVIORAL THEORY

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INTRODUCTION AND OBJECTIVE: Narcotics are prescribed excessively following surgery and may lead to persistent opioid use. As many urologic oncology procedures are performed minimally invasively, an opportunity exists to push forward initiatives to minimize post-operative narcotic use. Here we report an effort to change entrenched clinical practice based on modern behavioral economics principles.

METHODS:: A quality improvement initiative to reduce inpatient opioid prescribing was launched in December 2019 at a tertiary cancer referral center. In phase I (December 2019-July 2020), urology providers were instructed to avoid postoperative opioids. Phase II (beginning August 2020) was grounded in social cognitive and nudge therapy and provided education to the entire care team (nurses, housestaff, and attendings) and order set modification to reflect an opioid sparing protocol (OSP). To assess efficacy, we analyzed the proportion of robotic prostatectomy (RALP) patients monthly that adhered to an OSP during each phase. Patient characteristics were compared by phase using Fisher's exact and Pearson's chi-square to compare categorical variables and Wilcoxon rank sum to evaluate continuous covariates. Logistic regression adjusting for phase, age, history of anxiety, depression or opioid use, assessed odds of adherence to OSP.

RESULTS: During phase I and II, 187 and 83 patients underwent RALP, respectively. 517 RALP patients from the preceding 2 years were selected for comparison. In the three cohorts, there were similar overall frequencies of patients with histories of anxiety (5.8%), depression (4.7%), and prior opioid use (9.4%). Adherence to the OSP substantially increased during each subsequent phase (85.5% vs 43.3% vs 20.9% respectively, p<0.001). The multivariable logistic regression also demonstrated significantly greater adherence to the OSP for patients in phase II (OR 21.6, 95% CI 10.3-45.5) and phase I (OR 2.7, 95% CI 1.6-4.5) compared with the baseline cohort.

CONCLUSIONS: Adherence to an OSP is most effective when initiatives incorporate the entire care team and are supported by nudge therapy-based structural changes. Using these strategies, most patients following robotic prostatectomy can avoid narcotics postoperatively.

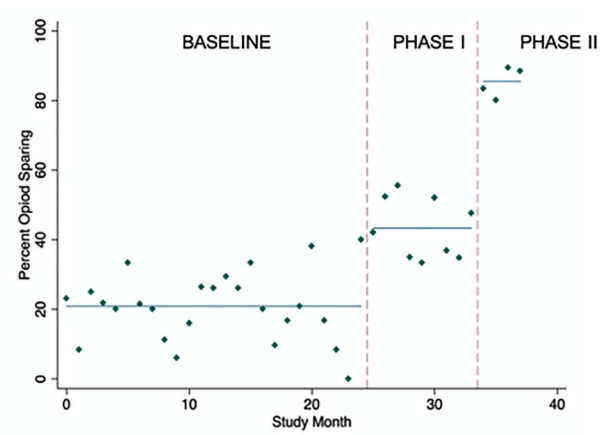

Figure 1: Adherence to Opioid Sparing Protocol after Robotic Prostatectomy following implementation of a Quality Improvement Initiative. Phase I involved verbal instruction to providers, while phase II consisted of education for the entire care team and order set modification. Green diamonds represent the monthly percent of patients that were opioid-sparing and navy line denotes the mean percent for each phase.

Source of Funding: None

PD28-06

THE ERECTOR SPINAE PLANE BLOCK REDUCES BREAKTHROUGH PAIN AFTER PERCUTANEOUS NEPHROLITHOTOMY

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INTRODUCTION AND OBJECTIVE: Inadequate pain control is a major barrier to same-day discharge after percutaneous nephrolithotomy (PCNL). This study was designed to evaluate whether the novel thoracic erector spinae plane block (ESPB) can reduce postoperative breakthrough pain and eliminate the need for intravenous (IV) opioids after PCNL.

METHODS: A prospective cohort study of adult patients undergoing percutaneous nephrolithotomy (PCNL) was conducted at our institution from May 2020 to January 2021. Patients with a history of chronic pain and opioid use were excluded from the study. Participants in the intervention group received an ultrasound-guided T11 erector spinae plane block prior to the start of the procedure. Patients were admitted postoperatively and prescribed an oral pain regimen; IV opioids were prescribed only upon request. Verbal pain score $\geq$7) and opioid administration within 24 hours were analyzed as the primary outcome.

RESULTS: A total of 56 patients undergoing PCNL were included in our study, of whom 23 successfully received ESPB. We found that 78% of patients in the ESPB group compared to 47% in the control group were successfully managed with oral analgesics alone without IV opioids or breakthrough pain (p = 0.03). Although no difference in total 24-hour opioid usage was detected, ESPB significantly lowered the odds of having breakthrough pain after adjusting for factors such as age, sex, dilated tract size, and tract location (OR 0.21, 95% CI 0.050-0.78).

CONCLUSIONS: ESPB greatly reduces breakthrough pain and IV opioid use after PCNL, and most patients who receive an ESPB can be managed with oral analgesics alone. The ESPB can be performed by urologists or by the regional pain specialists as part of a routine perioperative workflow. This holds great promise in facilitating same-day discharge after PCNL, a benefit that is especially impactful in the COVID-19 era.

Source of Funding: None