render accurate pre-operative staging paramount. Incidental indeterminate pulmonary nodules (IPNs) are a common pre-operative finding in clinical practice, thus representing a significant management challenge since metastatic patients are unlikely to benefit from extirpation. Thus, we sought to evaluate the natural history of IPNs in a large institutional cohort that underwent RC.

METHODS: We reviewed our institutional database for patients who underwent RC from 2000-2014 for urothelial carcinoma (UCC) of the bladder & had $\geq$1 identifiable pulmonary lesion on preoperative staging imaging measuring $<$2cm in any axis. Patients who were M1 at surgery or had non urothelial histology were excluded. Cumulative incidence of any lung metastasis was estimated, adjusting for competing risk of death; overall survival (OS) was estimating using Kaplan Meier methods. We sought to determine the natural history of these pulmonary lesions and evaluated predictors of metastatic etiology.

RESULTS: During the study period, 681 RC were performed at our institution. Of which, 73 patients with an identifiable preoperative IPN met inclusion criteria & underwent RC. In this subset, 23% were female, 22% were active smokers & 55% former smokers. The median age at surgery was 70 yrs (range 43-88). 51% received neoadjuvant chemotherapy & 62% of RC were performed using the traditional open approach (vs 38% robotically). Final pathologic staging included 16% pT0N0Mx, 19% pTa/Tis/T1N0Mx, 43% pT2-4N0Mx, & 22% pTanyN+Mx. Median IPN size was 0.7$\pm$0.3cm. At median follow up of 23.5 months, the IPNs in 92% (67/73) of patients were clinically benign, with metastatic urothelial cancer confirmed in only 5 patients, & a primary lung malignancy diagnosed in 1 patient. In the IPN cohort, lung metastasis at non-IPN sites were detected in 2 additional patients. Cumulative incidence of any lung metastasis at 12, 24 & 36 months was 5.9% (95%CI 1.9-13.3%), 7.6% (95%CI 2.8-15.7%), & 10.3% (95%CI 3.9-20.2%), respectively. OS at 12, 24 & 36 months was 75.3% (95%CI 62.3-83.9%), 65.8% (95%CI 53-1-75.9%), & 54.0% (95%CI 39.7-66.2%), respectively.

CONCLUSIONS: The majority of IPNs in patients who proceeded to RC for UCC of the bladder were stable upon follow-up & rarely represented malignancy. Patients with IPNs have OS consistent with previously published literature. As such, in appropriately screened UCC patients, IPNs should not be a barrier to proceeding with extirpative surgical therapy.

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MP58-13

IS TRANSURETHRAL RESECTION ALONE ENOUGH FOR DIAGNOSIS HISTOLOGICAL VARIANTS? A SINGLE CENTER STUDY

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INTRODUCTION AND OBJECTIVES: Urothelial carcinoma of the bladder presents often morphological features that differ from the urothelial common aspect. Specifically, this parameter may change the therapeutic approach at the time of transurethral resection (TUR). However, data are scarce regarding the concordance of histological variants at TUR using radical cystectomy (RC) features as a reference. The aim of our study was to report incidence of histological variants in TUR and RC and to evaluate the agreement between TUR and RC considering histological variants.

METHODS: A total of 779 patients treated with TUR and subsequently with RC and pelvic lymph node dissection between 1990 and 2013 at a single tertiary referral center were included in the study. Patients treated with neoadjuvant chemotherapy were excluded from the study due to the aim of work. Dedicated uropathologists evaluated TUR and RC at the same tertiary referral center. Variant histology classification used in our analyses were: sarcomatoid, small cell, squamous or micropapillary. All the other variants were group together as found in less than 10 patients. Grade agreement was calculated using the Cohen kappa coefficient. Absolute value ranges between 0 and 1, where 0 represents pure chance agreement, and 0.1 to 0.4, 0.4 to 0.75, and 0.75 to 1.0, respectively, represent poor, intermediate, and good agreement. Univariable and multivariable logistic regression evaluated the association between the presence of histological variants at TUR and the risk of incur in adverse pathologic features at RC.

RESULTS: Considering TUR, 213 (27.3%) patients were diagnosed with histological variants. Of these, 2.1% (n=16) were found with sarcomatoid variant, 1.7% (n=13) with small cell, 7.1% (n=55) with squamous, 12.5% (n=97) with micropapillary and 4.1% (n=32) defined as others. Considering RC, 212 (27.2%) patients were diagnosed with histological variants. Of these, 2.1% (n=16) were found with sarcomatoid variant, 1.7% (n=13) with small cell, 3.9% (n=30) with squamous, 10.2% (n=78) with micropapillary. Cohen kappa concordance was used to analyze agreement between TUR and RC considering histological variants. In general, poor agreement was found considering micropapillary variant and the presence of an histological variant in general (0.11 and 0.27, respectively). On the other hand, intermediate agreement was found analyzing the presence of sarcomatoid, small cell and squamous variants (0.43, 0.61 and 0.61, respectively). At multivariable analyses, none of the histological variants evaluated at TUR were found to be associated to adverse pathologic stage or node positive disease at RC (all p$>$0.06). Conversely diagnosis of small cell carcinoma at TUR was found associated with an increased risk of harboring positive STSM (Odds ratio:2.08, confidence interval:1.27-3.41, p=0.03).

CONCLUSIONS: The presence of histological variants is a common finding in BCa patients. However, considering this aspect we found poor concordance between TUR and RC. Our findings highlight the necessity of developing new biomarkers to increase the diagnostic value of TUR which may change the therapeutic indication for RC or the necessity of neoadjuvant treatment.

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MP58-14

LIMITS OF TRANSURETHRAL RESECTION IN DETECTING UNCOMMON HISTOLOGICAL VARIANTS WITHIN BULKY BLADDER TUMORS IN REAL-LIFE CLINICAL PRACTICE

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INTRODUCTION AND OBJECTIVES: Rare histotypes represent almost 10% of bladder tumors, more often represented within large and muscle invasive transitional cell carcinomas of the bladder (MIBC). Neoadjuvant chemotherapy is recommended (Grade A) by international guidelines. Rare histological variants, more aggressive and less responsive to systemic chemotherapy might remain unrecognized at initial transurethral resection (TURBT) in everyday clinical practice. We investigated the accuracy of TURBT in detecting rare histological variants in patients with large bladder tumors candidate to cystectomy.

METHODS: The clinical and pathologic data of 540 patients submitted to TURBT and/or cystectomy for bladder cancer between Jan. 2010 and Oct. 2016, were reviewed. The presence of uncommon histotypes within urothelial bladder carcinoma has been assessed. Rare variants were diagnose according WHO criteria. Standard hematoxilyn-eosin stain was adopted and further immunohistochemistry was performed. Inferential statistical analysis was performed.

RESULTS: Out of 540 patients, 43 (7,9%) showed rare histotypes of bladder cancer. In 5 (11,6%) cases the uncommon histotypes was revealed by palliative TURBT . The remaining 38 patients were submitted to cystectomy for bladder tumors of considerable size (mean diameter 7,8 cm; range of 5-11 cm); 14 (36,8%) harbored a pT4 tumor. The rare histotypes were: squamous carcinoma 6 (13,9%), sarcomatoid 2 (4,8%), undifferentiated 5 (11,6%), neuroendocrine 3 (6,9%), mixed 27 (62,8%). TUR revealed an uncommon histotypes in 26 (68,4%) cases only. Moreover, in 5 (23.8%) patients an additional uncommon histology not detected by previous TUR, was demonstrated in cystectomy specimens.

CONCLUSIONS: The prognostic role of uncommon histotypes in bladder cancer is well documented. Unrecognized rare histotypes might have important therapeutic implications since possibly less responsive to neoadjuvant chemotherapy. These patients could benefit from an immediate cystectomy avoiding neo-adjuvant chemotherapy. The inaccuracy of TUR in everyday clinical practice in detecting uncommon variants could be explained by an inadequate sampling of large tumors. The ″pre-cystectomy″ TUR is often performed only to confirm the infiltration. As a matter of fact, the pathologists might not receive an adequate amount of tissue. To standardize the TURBT strategy including sampling of different areas of bulky tumors could be of clinical value in patients undergoing neoadjuvant chemotherapy.

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MP58-15
IMPACT OF TUMOR HISTOPATHOLOGIC TYPES ON PATTERN OF TUMOR RECURRENCE AFTER RADICAL CYSTECTOMY FOR MUSCLE INVASIVE BLADDER CANCER (MIBC).

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INTRODUCTION AND OBJECTIVES: To compare patterns of tumor recurrence of common histological types of bladder cancer after radical cystectomy. Predictors of cancer specific survival (CSS) were also identified.

METHODS: The records of 1737 consecutive patients treated with radical cystectomy between January 2004 till February 2014 were reviewed. A total of 937, 318, 223and 70 patients were diagnosed with urothelial carcinoma (UC), SCC,UC with squamous differentiation (SqD) and adenocarcinoma (AC) respectively. Clinical tumor recurrences were classified as local, when recurred in the soft tissue of pelvis and / or pelvic lymph nodes. Distant metastasis, on those recurred in remote sites including extrapelvic lymph nodes. Cancer specific survival (CSS) was estimated using Kaplan-Meier survival method and compared with log rank test.

RESULTS: Mean patient age was 58.4±8.1 years. Median follow up period was 23 months (IQR 9-57 months). Patients' characteristics are demonstrated in Table1. Five year CSS was 77.9%, 77.8%, 67.3% and 59.8% for SCC, AC, UC and SqD respectively ($p = 0.009$). Patients with SqD had the highest incidence of local pelvic recurrence reaching 21% followed by SCC (15.4%). Distant metastasis was observed in 157 (16.8%) and 41(18.4%) patients with UC and SqD respectively in comparison to 7(10%) and 20 (6.3%) in adenocarcinoma and SCC cases respectively. Bone was the commonest site of distant metastasis. The independent prognostic factors of CSS, of all treated patients, on multivariate analysis were T stage (pT3-4 vs pT0-2) (HR 3, 95% CI 2.3-3.9, $P < 0.0001$), lymph node metastasis (HR 1.7, 95% CI 1.29-2.2, $P < 0.0001$), lymphovascular invasion (HR 1.5, 95% CI 1.1-2, $P = 0.001$) and obstructive uropathy at presentation (HR 2.2, 95% CI 1.4- 3.4, $P < 0.0001$).

CONCLUSIONS: After radical cystectomy, distant tumor metastasis was more frequently observed in UC and its variant while local recurrence was more common in patients with SCC and adenocarcinoma.

Table1. Clinical and pathological characteristics of bladder cancer patients treated with radical cystectomy between 2004-2014

	Urothelial Carcinoma (UC)	UC with squamous differentiation (Sq D)	Squamous Cell Carcinoma (SCC)	Adenocarcinoma	P value
No (%)	937 (60.5%)	223 (14.4%)	318 (20.5%)	70 (4.5%)	
Age (mean)	58.9 ± 8	60 ± 7.8	57 ± 8.3	55.8 ± 7.8	
Gender					< 0.0001
Male	841 (89.8%)	174 (78%)	217 (68.2%)	56 (80%)	
Female	96 (10.2%)	49 (22%)	101 (31.8%)	14 (20%)	
Grade					< 0.0001
GI	1 (0.1%)	0	186 (58.5%)	28 (44.4%)	
GII	164 (17.5%)	13 (5.9%)	104 (32.7%)	31 (49.2%)	
GIII	772 (82.4%)	209 (94.1%)	28 (8.8%)	4 (6.3%)	
T-Stage					< 0.0001
Organ confined	559 (59.7%)	93 (41.7%)	171 (53.8%)	42 (60%)	
Non organ confined	378 (40.3%)	130 (58.3%)	147 (46.2%)	28 (40%)	
N-Stage					< 0.0001
N0	698 (74.5%)	146 (65.5%)	272 (85.5%)	61 (87.1%)	
N +ve	239 (25.5%)	77 (34.5%)	46 (14.5%)	9 (12.8%)	
Local pelvic recurrence	133 (14.2%)	47 (21.1%)	49 (15.4%)	9 (12.9%)	0.036
Distant metastasis	157 (16.8%)	41 (18.4%)	20 (6.3%)	7 (10%)	< 0.0001
Distant metastasis site					
Bone	91	24	9	2	
Viscera	52	10	6	2	
Lung	26	7	4	2	
Distant lymph nodes	23	8	3	2	
Others	1			1	

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MP58-16
ONCOLOGIC OUTCOMES OF SQUAMOUS CELL CARCINOMA VERSUS UROTHELIAL CARCINOMA WITH SQUAMOUS DIFFERENTIATION AFTER RADICAL CYSTECTOMY FOR MUSCLE INVASIVE BLADDER CANCER (MIBC)

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INTRODUCTION AND OBJECTIVES: To compare clinico-pathological characteristics and oncologic outcomes between patients treated with radical cystectomy for pure squamous cell carcinoma (SCC) and urothelial carcinoma with squamous differentiation (SqD). We also, aimed to identify predictors of cancer specific survival (CSS) for each histologic variant.

METHODS: We reviewed data of 1737 consecutive patients treated with radical cystectomy between January 2004 till February 2014. A total of 318 and 223 patients were diagnosed with SCC and SqD respectively. Squamous differentiation was defined as intercellular bridges or keratinization in the tumor. Kaplan-Meier survival curves were used to estimate CSS.

RESULTS: Patients' demographics are illustrated in Table1. Patients with SqD were significantly more likely to have extravesical (58.3% vs 46.2%.$p = 0.006$) and nodal positive disease (34.5% vs 14.5%. $p<0.0001$) than SCC patients. Bilharzial eggs were found in 61% of SCC vs 46% of SqD ($p=0.001$). Median follow up period for SCC was 3.9 (0-12.4) versus 2 years (0-12) for SqD. During this period, 49 (15.4%) patients with SCC recurred locally and 20 (6.3%) recurred distally. Meanwhile, among SqD group 41 patients (18.4%) developed distant metastasis and 47 (21. 2%) experienced local recurrence. The estimated 5-year CSS was 77% and 59.8 % for SCC and SqD respectively (Fig.1) (Log rank <0.0001). In patients with SCC, Cox regression models identified higher T-stage (HR 2.3, 95% CI 1.3-3.9, $P= 0.002$) and preoperative anaemia (HR 1.7, 95% CI 1.035-2.8, $P= 0.036$) to be significantly associated with worse CSS. In patients with SqD, higher T-stage (HR 1.7, 95% CI 1.06-3, $P= 0.028$) and nodal metastasis (HR 2.2, 95% CI 1.3-3.5, $P = 0.002$) were associated with reduced CSS.

CONCLUSIONS: Patient with SCC had better 5-year CSS in comparison to SqD. The higher rate of extravesical disease and lymph node metastasis in SqD patients is indicative of aggressive behavior of this histologic type.