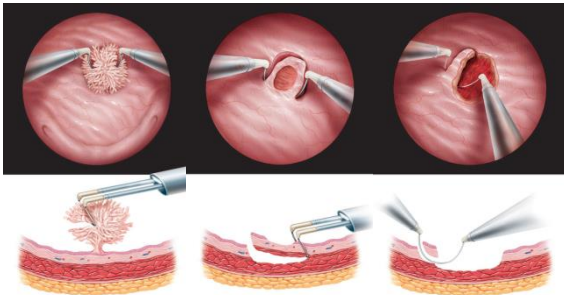


## Background

Textbook TURB requires presence of detrusor muscle in TURB specimen to ensure correct staging, furthermore current guidelines state, that absence of detrusor results in higher risk of residual disease and early recurrence, understaging with incorrect treatment; hence reTURB is strongly recommended. Our own daily clinical practice experience led us to evaluate our extensive data to define real risk and, if appropriate, to challenge such strict recommendation to avoid unnecessary second resection in at least subgroup of patients.



## Materials & Methods

Our study includes patients with primary intermediate and high risk bladder cancer (according to EAU Guidelines definition)

managed in single tertiary care centre. Recorded clinical and pathological data were statistically analyzed for differences (Chi-square test, Mann-Whitney U-test) and corresponding ORs were calculated to examine the effect of muscle absence/presence on probability of reTURB residual tumor, early recurrence (3-month cystoscopy), recurrence and progression.

## Results

All 488 patients complying inclusion criteria were divided in subgroups (no muscle – 204 pTx patients, separately analysed as 105 pTx/1 pts with and 73 pTx/a pts without submucosa invasion, 26 pTx/x no submucosa in specimen; 228 pT1 and 56 pTa patients with present muscle served as control groups). All compared subgroups were well balanced for known clinicopathological risk factors. ReTURB was performed in 233 cases, pT2 residual tumour was found in 7 cases only (3%, 6 in pTx/1 and 1 in pT1 group). Comparing pTx/a vs pTa and pTx/1 vs pT1 subgroups we found no differences (Chi-square, p=NS) in incidence of reTURB residual tumour (26.1vs29.2%; 56.6vs45.1%), early recurrence (5.5vs5.6%; 9.4vs11.2%), recurrence (44.8vs44.2%; 51.1vs58.1%) and progression (4.9vs3.8%; 19.5vs22.7%).

Corresponding ORs didn't reach significance. There was no difference in median time to first recurrence in both subgroups (12vs14; 10vs12 mo) and progression in pTx/a vs pTa (50vs53 mo), with the only significant difference in pTx/1 vs pT1 progression time (42.5vs59 mo, p=0.007).

| Incidence        | PTx/a vs pTa<br>P-value | pTx/1 vs pT1<br>P-value |
|------------------|-------------------------|-------------------------|
| Residual tumor   | 26.1% vs 29.2%<br>NS    | 56.6% vs 45.1%<br>NS    |
| Early recurrence | 5.5% vs 5.6%<br>NS      | 9.4% vs 11.2%<br>NS     |
| Recurrence       | 44.8% vs 44.2%<br>NS    | 51.1% vs 58.1%<br>NS    |
| Progression      | 4.9% vs 3.8%<br>NS      | 19.5% vs 22.7%<br>NS    |

## Conclusion

Considering our intermediate and high risk bladder cancer dataset, when submucosa was well defined in specimen and was invasion-free, absence of muscle didn't increase risk of understaging and unfavorable prognosis, thus routine reTURB is questionable. When submucosa was invaded, absence of muscle increased risk of understaging, but in general prognosis wasn't deteriorated.