

Higher prevalence of benign tumors in men with testicular tumors and history of treated cryptorchidism

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Disclosures

- None

Introduction

- Cryptorchidism or undescended testis (UDT): known risk factor for testicular cancer
 - 6-fold if untreated, 2-3 fold if treated surgically
- Historically, patients with testicular cancer with a history of UDT have a higher rate of seminoma on pathology
 - But, patients with a benign tumor were excluded from analysis

Study Objective

- Few contemporary studies examine the effect of orchidopexy on testicular tumor pathology, inclusive of patients who have a benign testicular tumor
- Aimed to identify if surgically treated cryptorchidism correlated with testicular tumor pathology, risk category, and overall survival

Methods

- Single institution database of patients treated for testicular tumor from 2003 to present
- Inclusion criteria: testis tumor patients who have undergone an orchiectomy
- Exclusion criteria: unknown UDT history, unknown pathology

Methods

- Data collection: demographics, surgical history, tumor marker status, testicular cancer staging, survival
- Data analysis
 - Chi-squared test
 - Two-sample independent t-test
 - Two-sample test of proportions

Results

Demographics (n=435)

Variable	Total	History of UDT		p-value
		No	Yes	
Age at orchiectomy, mean years (sd)	33.2 (11)	31.0 (11)	34.5 (10.5)	0.572
Laterality, n (%)				0.119
<i>Bilateral</i>	8 (1.8%)	6 (1.5%)	2 (6.1%)	
<i>Left</i>	211 (48.6%)	198 (49.3%)	13 (39.4%)	
<i>Right</i>	216 (49.5%)	199 (49.3%)	18 (54.5%)	
Pathology, n(%)				0.03
<i>Benign</i>	24 (5.5%)	19 (4.7%)	5 (15.2%)	
<i>Seminoma</i>	141 (32.4%)	126 (31.4%)	15 (45.5%)	
<i>Mixed GCT</i>	156 (35.9%)	150 (37.3%)	6 (18.2%)	
<i>NSGCT</i>	97 (22.3%)	90 (22.4%)	7 (21.2%)	
<i>Other</i>	6 (1.4%)	6 (1.5%)	0	
<i>Non-Germ cell</i>	11 (2.5%)	11 (2.7%)	0	
LVI, n (%)	125 (28.7%)	119 (29.6%)	6 (18.2%)	0.161

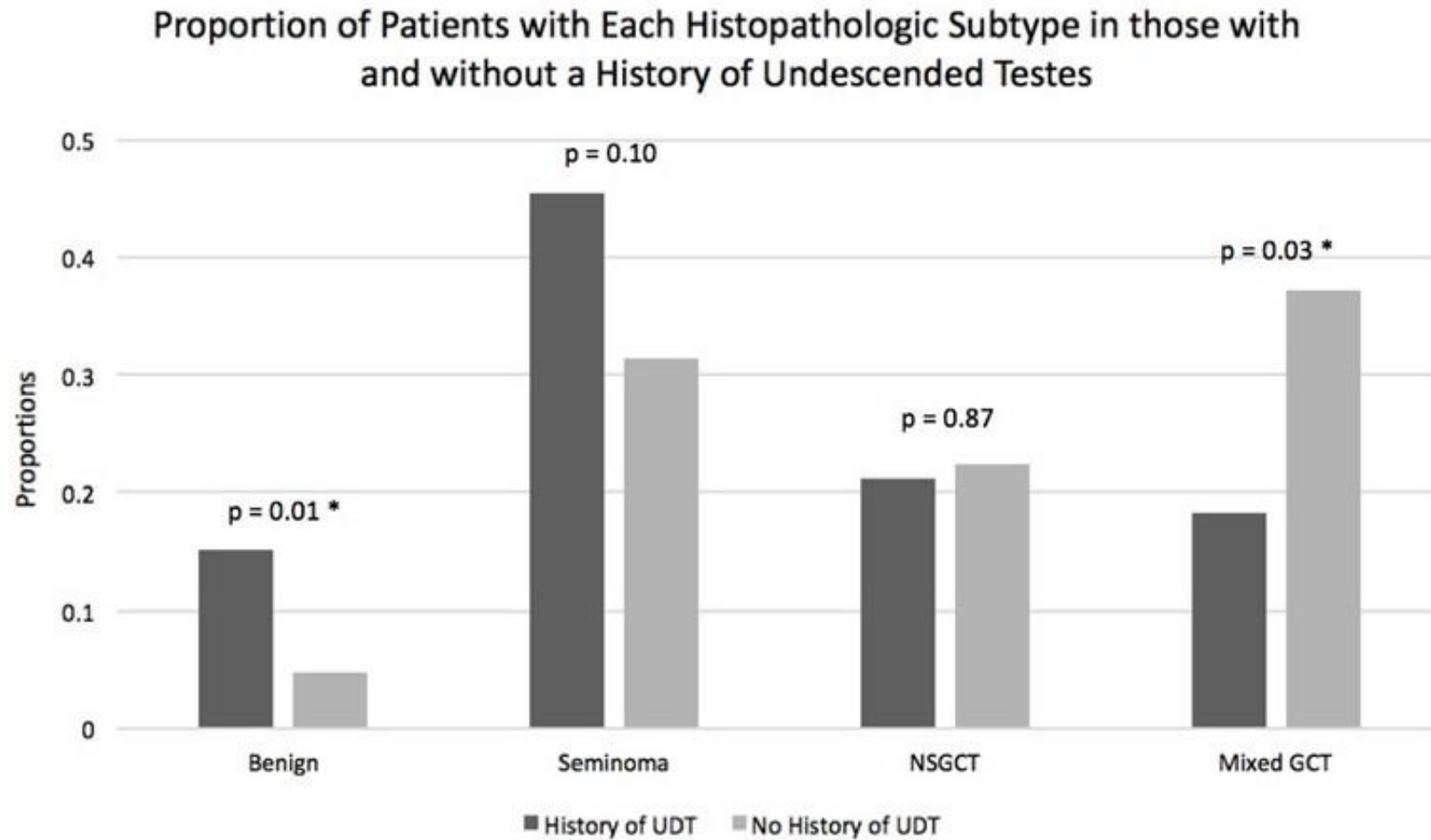
Results

Orchiectomy Pathology (n=435)

Pathology	History of UDT		p-value
	No	Yes	
Benign	19 (4.7%)	5 (15.2%)	0.012
Seminoma	126 (31.4%)	15 (45.5%)	0.096
Mixed GCT	150 (37.3%)	6 (18.2%)	0.028
NSGCT	90 (22.4%)	7 (21.2%)	0.876
Other	6 (1.5%)	0	0.480
Non-Germ cell	11 (2.7%)	0	0.336

One proportion z-test with $H_0 = 0.076$, the proportion of UDT in our sample. Two-sided p-value.

Results



Results

Risk Category (Germ cell tumors only, n = 397)

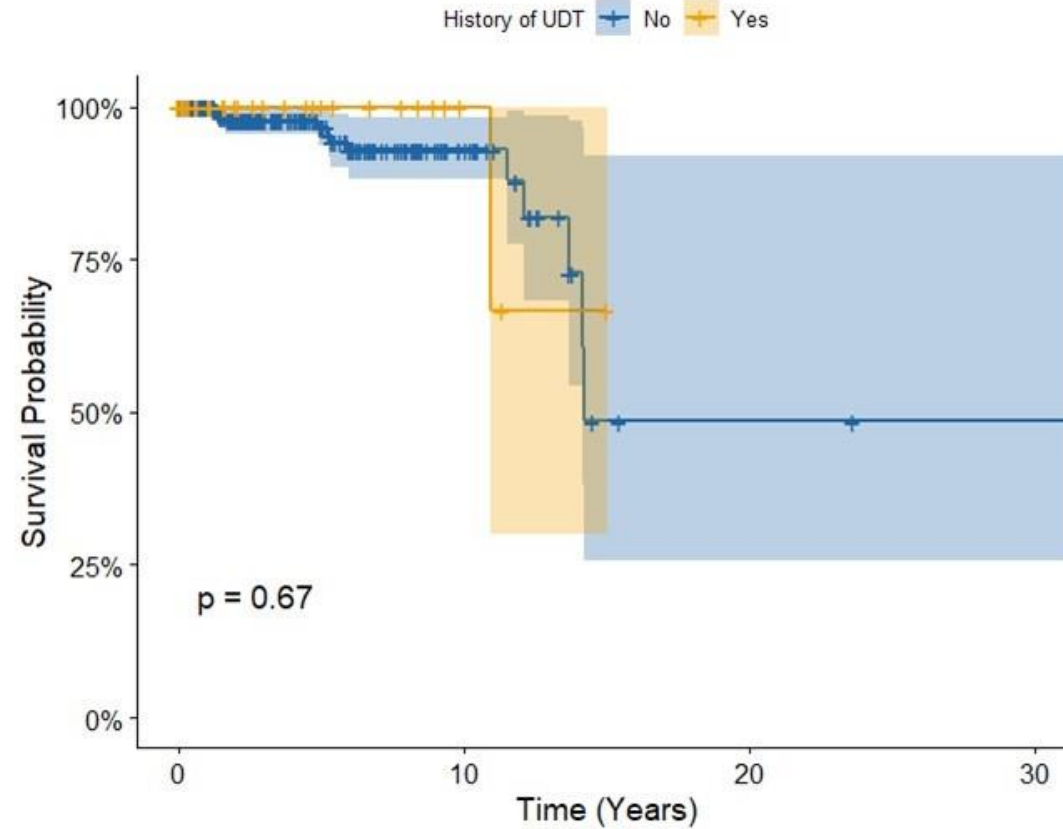
Risk Category, n (%)	Total	History of UDT	
		No	Yes
Very good	274 (69%)	256 (69.4%)	18 (64.3%)
Good	36 (9.1%)	32 (8.7%)	4 (14.3%)
Intermediate	11 (2.8%)	11 (3%)	0
High	18 (4.5%)	16 (4.3%)	2 (7.1%)
Unknown	58 (14.6%)	54 (14.6%)	4 (14.3%)

p value = 0.68

58 patients with insufficient information for risk stratification

Results

Overall survival after orchiectomy



Event = death

Censored at last follow-up

Conclusion

- Greater percentage of patients with benign testicular tumors after orchiectomy if they have a history of surgically treated UDT
- In this specific subset of patients, is there a
 - Role for screening?
 - Testis sparing surgery?