statistically significant difference in the long-term distribution of ESRD outcomes over time, \( p = 0.819 \).

CONCLUSIONS: In these clinically matched cohorts comparing PVA to PVES, there was no statistically significant difference in renal outcomes in the short term as determined by creatinine nadir within 6 weeks and 1 year of primary intervention. Long-term results similarly show no statistically significant difference in ESRD outcomes. Although these are preliminary findings based on a small sample, this is the first study of this kind to provide insight into the effect of primary intervention on renal outcomes while reducing critical biases of inherently heterogeneous cohorts.

Source of Funding: None

**MP11-15**

**PATIENT REPORTED REASONS FOR DELAYED PRESENTATION TO HOSPITAL WITH TORSION AND IMPACT ON TESTICULAR OUTCOMES**

Thawatchai Mangonsrisuk, Nicholas Mitsakakis, Luis Guerra, Melise Keays*, Ottawa, Canada

INTRODUCTION AND OBJECTIVE: Population based studies demonstrate that over one third of children and teenagers with testicular torsion lose their testicle due to advanced presentation. Validated scores and expedited pathways have been published to decrease hospital (system delays) to definitive OR. While pre-hospital delays tend to be longer than hospital delays in torsion, very little research has focused on patient-centered reasons for delay in seeking care. Objective: Evaluate patient-reported symptoms and reasons for delay to presentation to hospital and assess their impact on testicular torsion viability (based on pathology review or post-operative atrophy).

METHODS: Electronic health records of children <18 years with ICD-9 diagnosis of testicular torsion and ICD-10 procedure of orchidectomy or orchiopexy in a single academic pediatric hospital from 2010 to 2020 were reviewed. Elective orchidectomy cases or confounding diagnoses were excluded. Demographic data, pre-hospital pain duration, patients’ activity at onset, reasons for delayed presentation, system delays (time from ER triage to surgery), and testicular outcomes were extracted. Poor testicular outcomes including non-viability confirmed by pathologic review or when >50% atrophy seen on post-operative follow-up.

RESULTS: 258 cases met inclusion criteria. Most patients presented with scrotal pain/swelling (85.4%), the remainder with abdominal pain (9%), inguinal pain/swelling (4%) or other (2%). Atypical presentations had a longer but non-significant time to presentation compared to scrotal pain (10 vs 6 hrs, \( p = 0.35 \)). Pain onset occurred during sleep (54%), during activities (playing/sports) (16.2%), at rest (relaxing/watching TV) (14.3%), studying (5%), eating (5%), strenuous activity (heavy lifting/masturbation) (4%), other (2%). Pain onset during sleep had the shortest pre-hospital delay (4 hrs) and lower risk of orchietomy (OR 0.31) whereas misdiagnosis had the longest time to presentation and highest odds of orchietomy (OR 8.22, \( p < 0.01 \)). 86 patients with delayed presentation (range 16-21 hrs) reported reason for delay to hospital including: tolerable pain (30%), intermittent pain (25%), prior resolved episode (10.5%), able to control pain with over-the-counter pain medications (9%) or misdiagnosed (7%). There were no seasonal variations observed (23% summer, 25% fall, 26% winter and 26% in spring). Overall, 69.7% had a viable testicle on follow-up, 21% underwent an orchietomy (pathology review confirmed all non-viable) and 9.3% had testicular atrophy rates >50%. Pre-hospital delays represented over 75% of time delay to definitive surgery and were correlated with non-viability or atrophy whereas hospital delays were not.

CONCLUSIONS: Pre-hospital patient delays are significantly longer than hospital delays to definitive surgical correction for testicular torsion and increase risk of testicular loss or atrophy. While urologists play a key role in increasing awareness of testicular torsion and improving system delays to definitive care, this study highlights the need for broader educational campaigns targeting patients and parents to promote earlier presentation to hospital.

Source of Funding: None

**MP11-16**

**PREDICTORS FOR TESTICULAR ATROPHY AFTER EMERGENCY ORCHIDOPEXY FOR TESTICULAR TORSION**

Thawatchai Mangonsrisuk, Luis Guerra, Nicholas Mitsakakis, Melise Keays*, Ottawa, Canada

INTRODUCTION AND OBJECTIVE: Population based studies demonstrate that over one third of children and teenagers with testicular torsion lose their testicle due to advanced presentation. Validated scores and expedited pathways have been published to decrease hospital (system delays) to definitive OR. While pre-hospital delays tend to be longer than hospital delays in torsion, very little research has focused on patient-centered reasons for delay in seeking care. Objective: Evaluate patient-reported symptoms and reasons for delay to presentation to hospital and assess their impact on testicular torsion viability (based on pathology review or post-operative atrophy).

METHODS: Electronic health records of children <18 years with ICD-9 diagnosis of testicular torsion and ICD-10 procedure of orchidectomy or orchiopexy in a single academic pediatric hospital from 2010 to 2020 were reviewed. Elective orchidectomy cases or confounding diagnoses were excluded. Demographic data, pre-hospital pain duration, patients’ activity at onset, reasons for delayed presentation, system delays (time from ER triage to surgery), and testicular outcomes were extracted. Poor testicular outcomes including non-viability confirmed by pathologic review or when >50% atrophy seen on post-operative follow-up.

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