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Acute Segmental Testicular Infarction Resulting From Illicit Anabolic Steroid Use

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Poster #92

EFFICIENT HOLMIUM LASER ENUCLEATION OF THE PROSTATE CAN BE PERFORMED AFTER PROSTATIC ARTERY EMBOLIZATION FOR MASSIVE PROSTATE GLANDS (> 250 GRAMS)

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Presented By: Jordan Krieger, MD, BS

Introduction: Prostatic artery embolization (PAE) has the ability to decrease blood supply to the prostate and shrink the prostate, but it is unclear if PAE causes changes to the prostate making surgical intervention on the prostate technically difficult. Our objective was to evaluate if holmium laser enucleation of the prostate (HOLEP) could be performed efficiently and safely after PAE for massive prostate glands (> 250 grams).

Methods: Patients with prostate glands over 250 grams on imaging (CT or MRI) and symptomatic BPH were offered HOLEP with PAE ahead of time. Preoperative demographics were evaluated along with PAE and HOLEP procedural times, enucleated volume and postoperative complications.

Results: Nine patients had prostate glands >250 grams and underwent HOLEP with PAE prior. Prostate size on pre-operative imaging was 290.3±38.5 grams and 6 (66%) patients were catheter dependent prior to intervention. 8 (89%) patients underwent bilateral PAE while one patient underwent unilateral PAE with a procedure time of 174.4±64.6 minutes. HOLEP was successfully performed in all patients with procedural time of 159.4±48.5 minutes, enucleation time of 91.4±22.3 minutes, and enucleated volume of 130.8±41.5 grams. Enucleation efficiency was 1.43 grams per minute. All patients passed a void trial on their first attempt after surgery. One patient required repeat surgery for morcellation of a retained fragment.

Conclusion: HOLEP can be performed efficiently without increased complications after PAE by an experienced surgeon. This is important as PAE has the potential to be an adjunct treatment in massive prostate glands that are otherwise technically difficult to resect.

Funding: N/A

Poster #93

ACUTE SEGMENTAL TESTICULAR INFARCTION RESULTING FROM ILLICIT ANABOLIC STEROID USE

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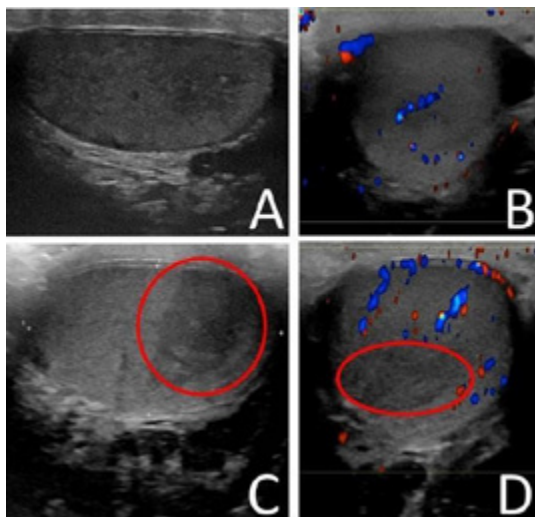
Presented By: Jacob Robert Stephens, MD

Introduction: Segmental testicular infarction (STI) is a rare cause of acute scrotum of unknown etiology. The diagnosis is often made by color Doppler ultrasonography (CDUS) demonstrating absent perfusion in a well-defined testicular region. Previously patients underwent surgical exploration, but currently conservative therapy is recommended.

Methods: We report a case of STI related to anabolic steroid use.

Results: A 44-year-old male with a history of hypertension presented to the emergency room with acute, severe right testicular pain which was unprovoked and constant. Physical exam was notable only for tenderness at the inferior right testicle. CDUS showed small bilateral hydroceles but preserved blood flow (Figure 1A-B). Upon receiving analgesics with moderate relief, he left AMA but returned the following day with unrelenting pain. Exam was unchanged though repeat CDUS demonstrated a wedge of absent perfusion in the inferior right testicle (Figure 1C-D). Serum tumor markers were normal, though patient was polycythemic with a hemoglobin of 18.7 g/dL. On further questioning, patient revealed that he takes anabolic steroids for body-building. He was admitted for pain control and discharged two days later but unfortunately lost to follow up.

Conclusion: STI, once properly diagnosed, can be safely managed conservatively. Our patient's polycythemia, a consequence of exogenous testosterone, likely created a low-flow state leading to STI.



Funding: N/A

Poster #94

A NOVEL APPROACH TO SHORT BULBAR URETHRAL STRICTURES: VENTRAL URETHROTOMY FOR A NON-TRANSECTING EXCISION AND PRIMARY ANASTOMOSIS

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Presented By: Alexander Geisenhoff

Introduction: Excision and primary anastomosis (EPA) has been the gold standard procedure for definitively managing short bulbar urethral strictures. A non-transecting approach was developed to help preserve proximal blood supply of the urethra. The previously described technique involves a dorsal urethrotomy and excision of the stricture without disrupting the anterior spongiosum. We describe a novel approach by performing a ventral urethrotomy leaving the posterior spongiosum intact. By not requiring urethral rotation, we believe this technique is simpler and does not compromise outcomes.

Methods: Retrospective chart review was performed on 8 consecutive patients from April 2019 to February 2021 who underwent non-transecting EPA with ventral urethrotomy for short bulbar urethral strictures. We reviewed demographics and when available pre and postoperative data points including uroflow, post-void residuals, SHIM and AUA scores.

Results: All 8 patients underwent the aforementioned procedure. Average age was 48.6 years, and average stricture length was 1.375 cm. All 8 patients underwent postoperative voiding cystourethrogram at 2 weeks which confirmed no contrast extravasation and no residual stricture. We had a stricture free rate of 100% (8/8 cases) with median follow-up time of 4 months (range 0-14 months). Average increase in Q-max was 14.2 mL/s.

Conclusion: Our case series demonstrates that non-transecting EPA with ventral urethrotomy is a safe and effective alternative to dorsal urethrotomy for the management of short bulbar urethral strictures with the added benefit of requiring less complexity.

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