



# Scrotal Swelling in Adults, an Indication of IgA Vasculitis



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## Patient Presentation

**A 46 year old homeless man with history of IV drug use presented with 12 hours of scrotal swelling, redness and pain.**

- 3 days of pruritic, non painful rash on thighs, buttocks, and trunk
- Used heroin day of presentation, injected to right upper thigh
- No fever, abdominal pain, hematuria, or dysuria

### Physical Exam

- Vitals: 36.4 C, HR 79, BP 126/92, RR 16, O2 94% on RA
- Diffuse purpuric, non-blanching rash of lower extremities more pronounced posteriorly (Figure 1)
- Anterior scrotal edema, erythema, and induration without fluctuance with no eschar or crepitus (Figure 2)
- Scrotal pain with testicular elevation and palpation
- Track marks from IVDU throughout body

### Labs

- WBC 7.3 K/uL
- CRP 91 mg/L
- ESR > 80 mm/hr
- D-dimer 6.83 mcg/mL
- UA 3+ protein, Urine protein to Cr ratio >1.89

### Imaging

- Scrotal US: enlarged heterogenous appearance of the left epididymis with hyperemia, bilateral scrotal wall thickening, and small bilateral hydroceles. No signs of torsion, varicocele, hernia.

## Imaging



Figure 1: Posterior right leg, evidence of palpable, non-blanching purpura. Some areas of excoriated papules with crusted plaques not seen in above image

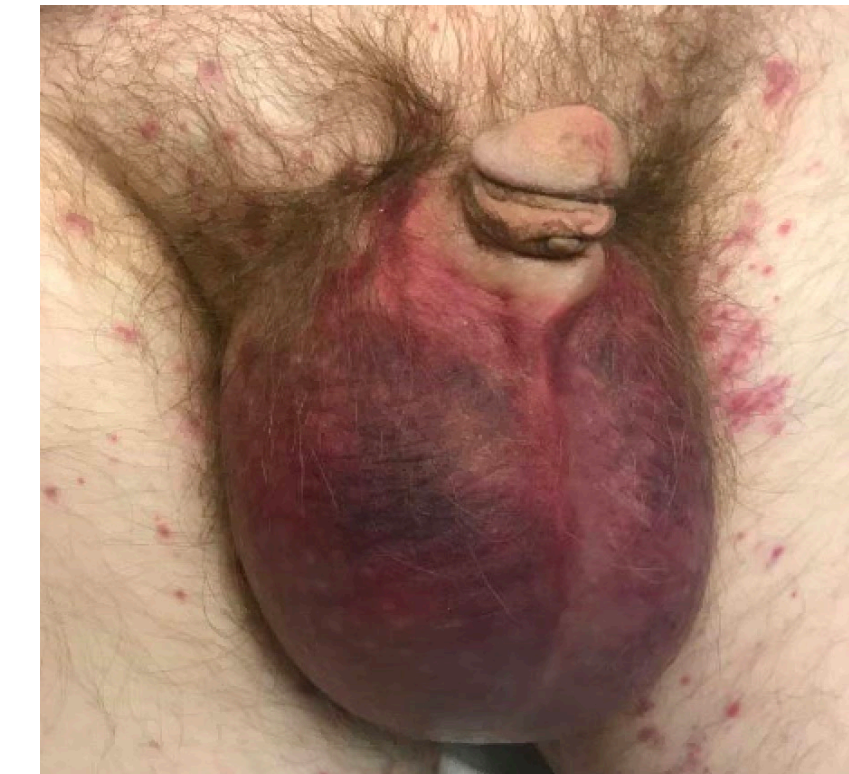


Figure 2: Diffuse purpura of entire scrotum, with indurated appearance. No penile involvement

## IgA Vasculitis

- Most common form of systemic vasculitis in children, 3-26.7 of 100,000 persons per year, compared to 0.8-1.8 of 100,000 persons per year in adults
- Classic features: non-thrombocytopenic palpable purpura, abdominal pain, hematuria, and arthritis
- Other organ involvement: CNS, lungs, scrotum, eyes
- Scrotal manifestations (2-32% prevalence): epididymitis, orchitis, and spermatic cord involvement.
- Treatment: symptomatic with acetaminophen/NSAIDs and if pain severe can use systemic steroids
- Typically self resolving, worse prognosis associated with degree of renal involvement that can progress to CKD
- Nephrotic range proteinuria can require systemic steroids +/- other immunosuppressants

## Case Discussion

- Empirically started on vancomycin and ceftriaxone due to concern of epididymo-orchitis with overlying cellulitis
- 24 hour urine protein collection 4284 mg
- Skin punch biopsy: Leukoclastic vasculitis with IgA deposition
- Renal biopsy: IgA Vasculitis w associated focal proliferative glomerulonephritis
- Day 4: Complete resolution of scrotal findings and rapid resolution of skin findings**
- Echocardiogram with no evidence of vegetations or valvular dysfunction
- Antibiotics were discontinued
- Started on lisinopril for proteinuria

### Disposition:

- Discharged with topical steroids for skin irritation, and plan for renal follow up to discuss need for additional immunosuppression given degree of proteinuria.
- Patient lost to follow up initially, then presented a month later with lower extremity cellulitis and notably complete resolution of skin and scrotal manifestations of the vasculitis

## Take home points

- Scrotal involvement is seen with IgA vasculitis and should be considered if seen associated with the classical rash or even isolated.
- Unnecessary treatment and procedures for scrotal involvement should be avoided unless imaging indicates otherwise
- Systemic steroids can be helpful for scrotal symptoms

## References

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