AMSER Case of the Month
September 2026

A rare cause of scrotal fullness

69 year-old male with painless scrotal swelling

Chad Stroope, MS4
Carolina Soto Davila, MD
Meghna Chadha, MD

LSU Health SHREVEPORT

AMSER

Patient Presentation

Patient: 69-year-old male
Past Medical History: HTN, HLD, ESRD on hemodialysis, and hepatitis C cirrhosis
Chief Complaint: Several months of painless scrotal swelling with recent worsening
Urology exam: diffuse edema; enlarged right testis without palpable mass; no skin change or pressure necrosis

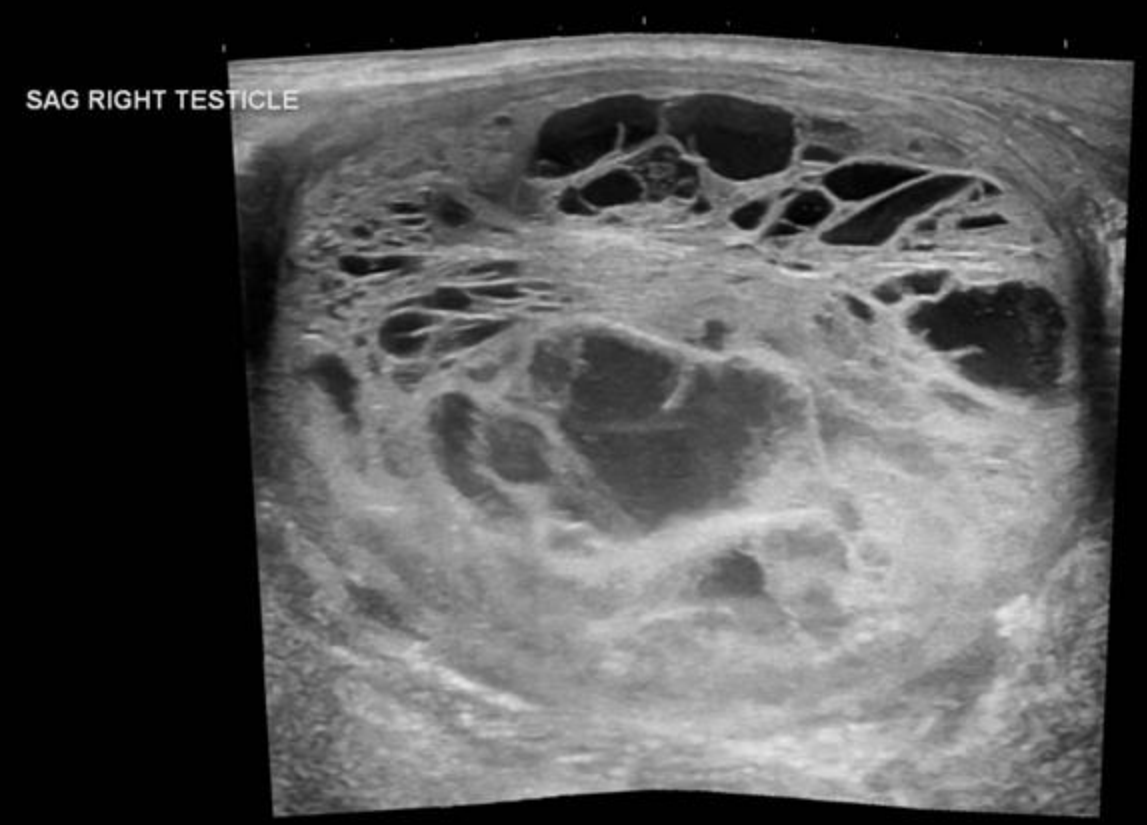
What Imaging Should We Order?

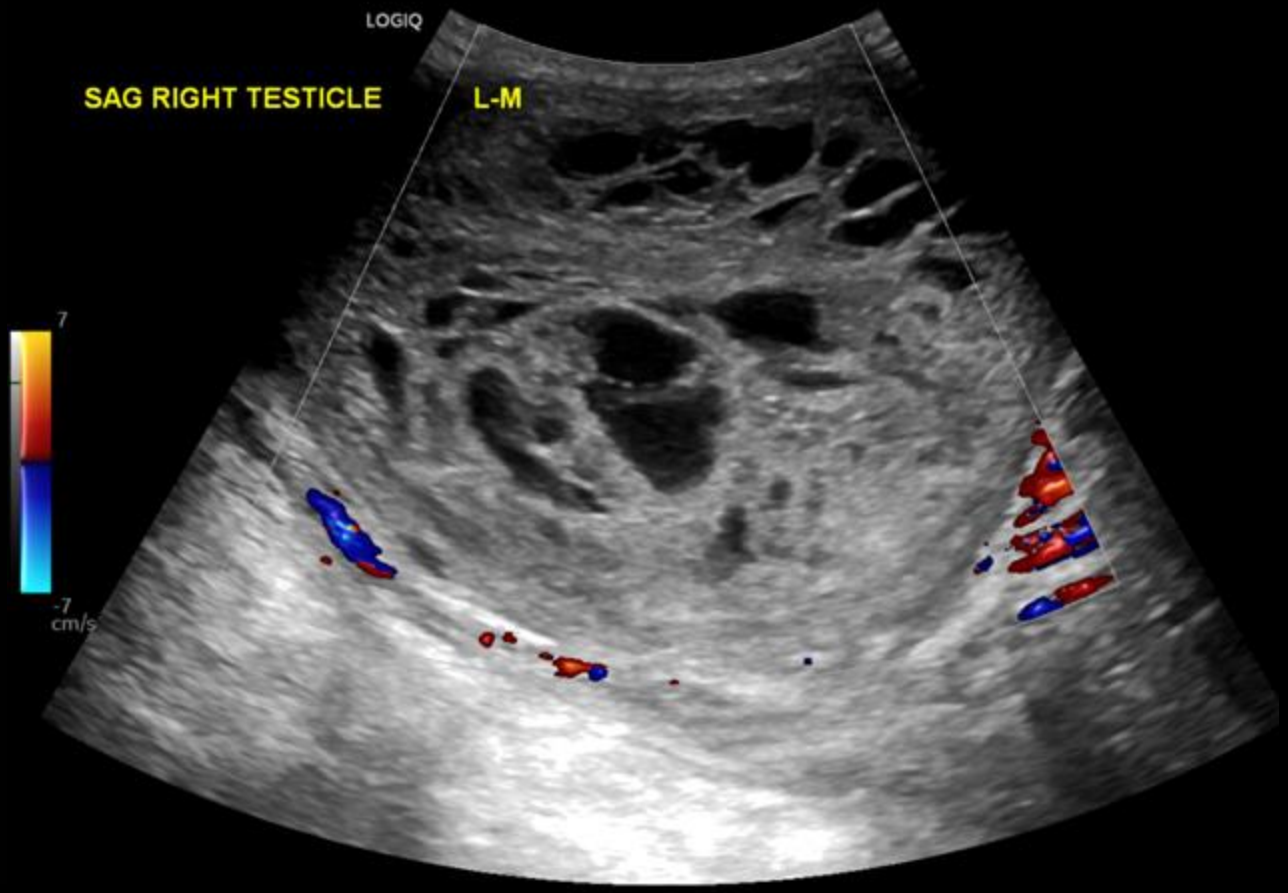
ACR Appropriateness Criteria

Scrotum abnormality, palpable, newly diagnosed, no history of infection, initial imaging.

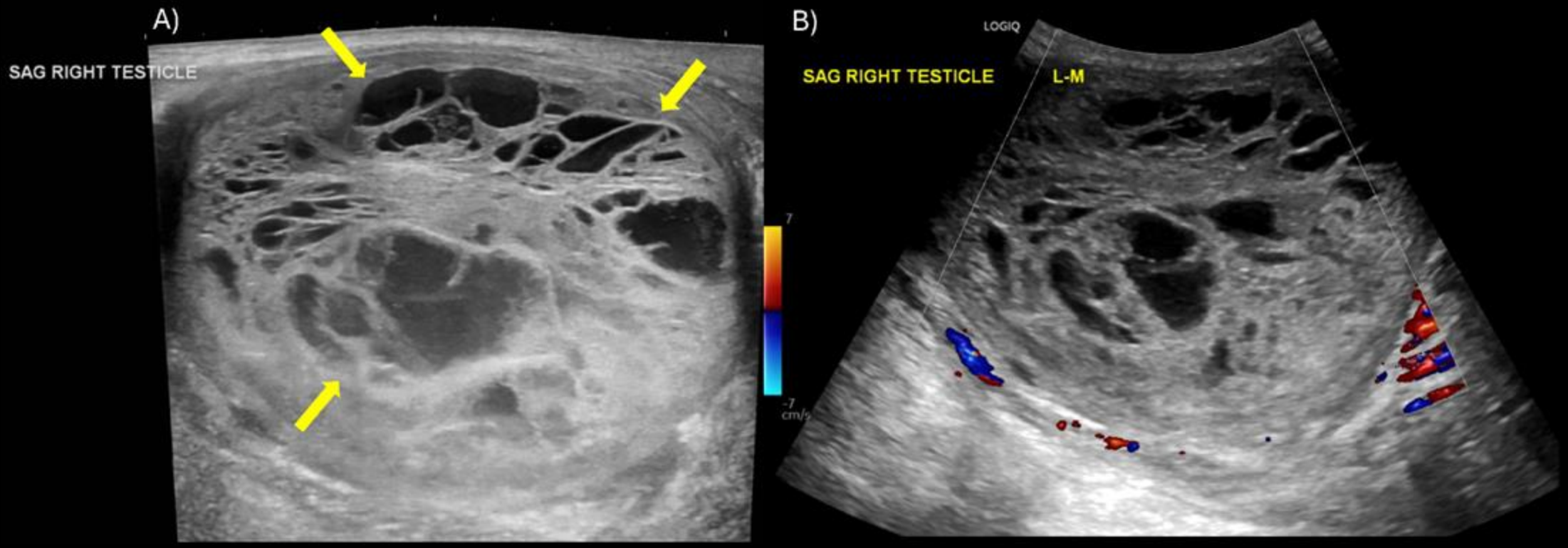
Procedure	Adult RRL	Peds RRL	Appropriateness Category
US duplex Doppler scrotum	0 mSv O	0 mSv [ped] O	Usually appropriate
US scrotum	0 mSv O	0 mSv [ped] O	Usually appropriate
MRI pelvis (scrotum) without and with IV contrast	0 mSv O	0 mSv [ped] O	May be appropriate
MRI pelvis (scrotum) without IV contrast	0 mSv O	0 mSv [ped] O	May be appropriate
MRI abdomen and pelvis without and with IV contrast	0 mSv O	0 mSv [ped] O	Usually not appropriate
MRI abdomen and pelvis without IV contrast	0 mSv O	0 mSv [ped] O	Usually not appropriate
CT abdomen and pelvis with IV contrast	1-10 mSv ☢☢☢	3-10 mSv [ped] ☢☢☢☢	Usually not appropriate

Findings (unlabeled)





Findings (labeled)



A) Multiple small, anechoic tubular/cystic structures clustered within the mediastinum testis, producing a microcystic appearance (yellow arrows). No associated mural nodularity or internal vascularity is identified on color Doppler (B).

Findings concerning for Tubular Ectasia of the Rete Testis (TERT)

Tubular Ectasia of the Rete Testis (TERT)

- Acquired *benign* dilatation of the rete testis caused by impaired efferent-duct outflow

- Typical US pattern shows clustered tubular or microcystic anechoic spaces centered in the mediastinum testis with absent internal Doppler flow

- Proposed mechanisms of TERT include mechanical obstruction, ischemic degeneration, prior inflammation or surgery, and age-related or hormonal changes

- Epididymal cysts, hydroceles, and spermatoceles commonly coexist and support an obstructive mechanism for TERT

Case Discussion

- Differential diagnosis include cystic teratoma, intratesticular varicocele, cystic dysplasia, simple cyst, tunica albuginea cyst, and epidermoid cyst
- Lesion location and morphology, the presence or absence of Doppler flow, and associated epididymal abnormalities can substantially narrow the differential diagnosis
- Recognition of the classic US presentation of TERT resulted in appropriate, non-invasive management

Case Discussion

• Once TERT is confidently identified by characteristic ultrasound findings, management is typically conservative; observation and clinical reassurance are appropriate unless atypical imaging features or concerning clinical findings warrant additional evaluation or urologic intervention.[1–6]

• As TERT is a benign, non-neoplastic condition that remains stable in most patients and has no malignant potential, cases have a very favorable prognosis.[1–6]

• In this case, the classic ultrasound pattern and findings on the urologic examination supported conservative management consisting of continued medical optimization and volume removal, along with scrotal elevation and compressive underwear as needed.

• Long-term genitourinary follow-up and interval imaging were not available for this case.

References

1. Jiménez-López M, Ramírez-Garrido F, López-González Garrido JD, et al. Dilatation of the rete testis: ultrasound study. Eur Radiol. 1999;9(7):1327-1329. doi:10.1007/s003300050842

2. Kara T, Durmaz MS, Ceken K. Ultrasonography of tubular ectasia of the rete testis with associated scrotal findings. J Med Ultrason (2001). 2013;40(1):27-32. doi:10.1007/s10396-012-0390-7

3. Dogra VS, Gottlieb RH, Oka M, Rubens DJ. Sonography of benign intrascrotal lesions. Ultrasound Q. 2006;22(2):121-136. doi:10.1097/01.ruq.0000219567.14259.9c

4. Bhatt S, Jafri SZH, Wasserman N, Dogra VS. Imaging of non-neoplastic intratesticular masses. Diagn Interv Radiol. 2011;17(1):52-63. doi:10.4261/1305-3825.DIR.3116-09.0

5. Mahlknecht A, Mahlknecht P, Fallaha M, Wieser A. Tubular ectasia of the rete testis (TERT): differential diagnosis of cystic testicular disorders. Arch Ital Urol Androl. 2015;87(1):5-7. doi:10.4081/aiua.2015.1.5

6. Bourimi C, El Hamzi A, Abaair Y, et al. Tubular ectasia of the rete testis: a benign yet unrecognized condition. Urol Case Rep. 2024;54:102732. doi:10.1016/j.eucr.2024.102732