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Amiodarone Induced Epididymo-Orchitis

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INTRODUCTION

- There are several causes for orchitis and epididymitis: sexually transmitted infections (STIs), trauma, chemical with backflow of urine, tuberculosis, and vasculitic diseases such as Behcet's disease. Orchitis and epididymitis due to Amiodarone can also present with a spectrum of clinical presentations.
- Chronic epididymyalgia in the absence of fever and leukocytosis is the chief symptom of this clinical entity ⁽¹⁾.
- Non-infectious epididymitis must be diagnosed with a careful medical history to prevent unnecessary antibiotic usage ⁽¹⁾.
- The purpose of this case report is to show early and clear identification of the toxicity and follow its management.

CASE REPORT

History of Present Illness:

- An 88-year-old white male presented to the emergency department at our institution with new-onset testicular pain and swelling of 3 weeks duration
- He had a past medical history of hypothyroidism, hypertension, sick sinus syndrome with pacemaker, paroxysmal atrial fibrillation, prostate cancer, and neurogenic bladder. He was on amiodarone 100 mg once a day since 2012.
- He denies experiencing difficulty

urinating, frequency, urgency, fevers, chills, dysuria, hematuria, urinary incontinence or retention.

Physical Exam:

- Vital Signs: blood pressure 165/77, pulse of 80, respiratory rate of 18, temperature 97.3, and SpO2 100% on room air.
- Physical exam: he had testicular swelling with erythema bilaterally. The testes were tender to palpation, and descended bilaterally without palpable lesions or masses.
- The left testicle was grossly enlarged and firmer than the right testicle.
- Digital rectal examination showed a firm, smooth grade 2 in size prostate without any palpable nodules.

Imaging:

- His urinalysis showed nitrates with few bacteria and 2-3 WBC, negative for any signs of infection.
- Urine culture was positive for Escherichia coli with <10,000 colonies.
- Doppler testicular ultrasound illustrated bilateral hydroceles, left greater than right with hyperemia of left testis and Epididymo-Orchitis (seen in figures 1-3).
- Renal ultrasound did not show acute findings.

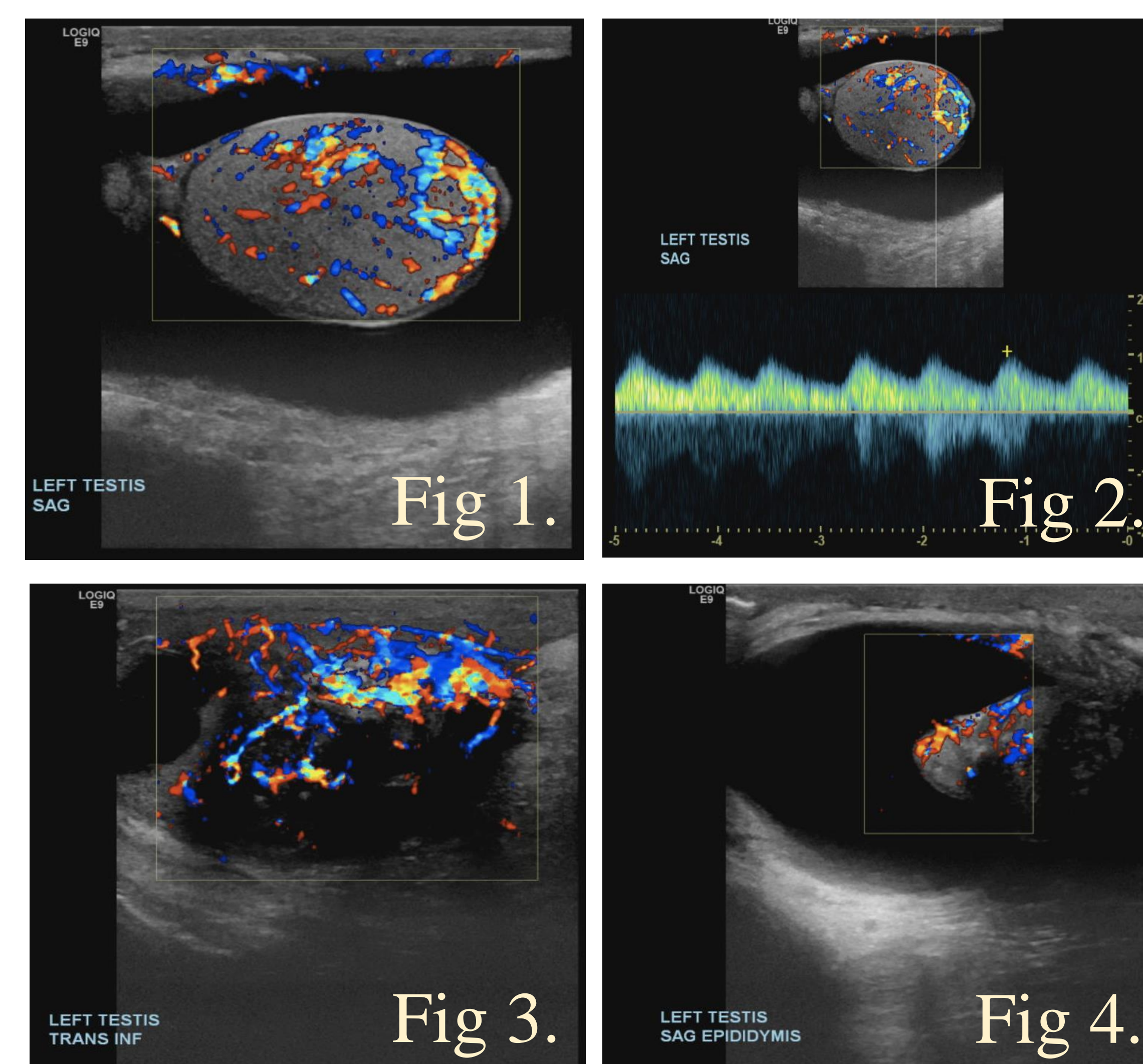
Hospital Course:

- He was initially treated with Levaquin 750 mg IV and then switched to

to Ceftriaxone, his Amiodarone was stopped .

- He was found to have a post void residual over 700cc and attempts to place both a Foley catheter and coude catheter were unsuccessful
- A bedside cystoscopy was performed on which a dense stricture in his bulbar/membranous urethra was visualized, subsequently dilated and an 18-French Council tip Foley catheter was placed.
- After two days of hospitalization and treatment, his testicular swelling started to decrease and his testicular pain began to improve.
- The remainder of the hospital course was unremarkable

Figure 1-4 :Doppler Testicular Ultrasound of Left Testes demonstrating hyperemia and Epididymo-Orchitis



DISCUSSION

- Amiodarone is an iodinated benzofuran derivative with class I, II, III and IV antiarrhythmic properties with multiple adverse effects.
- Genitourinary (GU) manifestations such as epididymitis and erectile dysfunction have an incidence of <1% ⁽²⁾.
- Risk factors for GU complications include duration of administration (7-15 months), dose (usually >700 mg/day) and blood concentration ⁽³⁾.
- Amiodarone usually causes bilateral testicular involvement and chronic epididymyalgia, in the absence of fever and leukocytosis, which was seen in our patient.
- After withdrawal of the drug, our patient clinically improved which is consistent with the observation that reducing or withdrawing the drug could alleviate epididymitis ^(1, 4).

CONCLUSION

- Although supportive care is the mainstay of treatment, patients can face permanent testicular damage.
- This case depicts why it is important to recognize a rare side effect of amiodarone early, and to discontinue the drug as soon as possible.

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