Amiodarone-Induced Sterile Epididymitis

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Key Words
Amiodarone
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Abstract
Sterile epididymitis in 2 patients who were on amiodarone for cardiac arrhythmias is presented. Decrease in drug dosage rendered the patients pain-free and testicular swelling resolved in a fortnight.

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Amiodarone, a benzofuran derivative, is a drug used for the treatment of refractory ventricular arrhythmias [1]. It is known that amiodarone accumulates in tissues, thus in the long-term giving rise to side effects such as corneal opacities [2], skin discoloration and photodermatitis [3], interstitial fibrosis and pneumonitis [4], depending on the dosage and duration of usage.

In this paper, 2 patients with acute epididymitis believed to be associated with amiodarone usage are presented.

Case Reports
Case 1
A 49-year-old white man was seen because of swelling and pain in the right hemiscrotum. He had no urinary symptoms. He was on amiodarone 200–600 mg daily for 3 years for ventricular tachycardia. On physical examination, both testes were normal, but the head of the right epididymis was slightly enlarged and painful. Urinalysis was normal; urine cultures were negative and an intravenous pyelo-gram performed revealed no abnormality. He was put on cotrimox-azole analgesics and given a scrotal support and bed rest. There was no change for 10 days until he reduced the dose of amiodarone from
Fig. 1. Ultrasound examination showing normal testis and enlarged epididymis (arrow).
Fig. 2. Repeat ultrasound after 10 months showing normal testis and epididymis.

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600 to 200 mg daily because of blurred vision. His antibiotic was stopped; he was pain-free within 5 days, and the swelling resolved within a fortnight.

Case 2
A 51-year-old white man was seen complaining of pain in the left hemiscrotum. He was on amiodarone 600 mg daily for 2 years for ventricular arrhythmia. Physical examination revealed a tender, enlarged left epididymis and normal testes. Urinalysis was normal and he had sterile urine. Cultures and antibodies were negative for chlamydial infection. A scrotal ultrasound showed normal testis and enlarged epididymis (fig. 1). After consulting his cardiologist, his amiodarone was decreased to 200 mg/day. He was pain-free in 10 days and the swelling resolved
within a fortnight without any antibiotic treatment but scrotal support and analgesics. A control ultrasound after 10 months was normal (fig. 2).

Comment
Epididymitis is usually caused by gram-negative microorganisms and encountered in patients with lower urinary tract obstruction, or after urethral instrumentation [5]. The route of infection is retrograde ascent of bacteria via the ejaculatory ducts. Recently Gasparich et al. [6] described amiodarone-associated epididymitis in 7 patients and found that tissue levels were extremely higher than expected. In 1 patient who had a postmortem examination the epididymis showed focal fibrosis and lymphocyte infiltration. Neither exploration nor biopsy was performed in these cases because of ethical reasons, but clinical recovery was dramatic after decreasing drug dosage. The 1st patient while not responding to antibiotics was cured after dosage adjustment and the 2nd patient was not started on antibiotics at all.

Although pathological examination of the tissue and amiodarone levels are essential to build a cause-effect relationship, I believe that these are cases of sterile epididymitis related to amiodarone and regarded as benign lesions since they respond well to dose adjustment.

Amiodarone epididymitis should be considered in patients on this drug and presenting with testicular swelling.

References