

Bilateral Seminal Vesicle and Vas Deferens Calcification in an Adult: A Case Report

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Abstract

Bilateral seminal vesicle and vas deferens calcification is a rare entity often seen in adults more than fifty years of age and mostly associated with certain diseases like diabetes mellitus, hyperparathyroidism and tuberculosis. Diabetes mellitus and senile atrophy are the most common reasons for calcification, however, tuberculosis and schistosomiasis occur less frequently.

This is a fifty three year old man presented with urinary discomfort and was requested to undergo a retrograde urethrocytography (RUCG) that demonstrated calcification of the seminal vesicles and vas-deferens, with urinary bladder calculus and urethral patency.

We present this case due to the rare nature of this condition and also presenting idiopathically.

Keywords: seminal vesicle; calcification; diabetes mellitus; bilateral

Introduction

Seminal vesicle (SV) calcification especially bilateral is a rare entity especially in the young and most often associated with disease conditions most especially diabetes mellitus [1,2,3].

Seminal vesicle calcification has been implicated as one of the factors responsible for male infertility and some symptoms from the urogenital tract⁴. In non-inflammatory causes of SV and vas deferens calcification, the calcification occurs in the muscular elements of the vas, here the lumen remains patent, this is in contrast to inflammatory causes which could either be mucosal or submucosal and consequently leading to either partial or complete obstruction of the vas deferens [4,5].

Seminal vesicle calcification was first reported in literature in the year 1906 in the American medical literature and reported on plain radiograph in the year 1946 [2,5,6]. The exact incidence of SV and vas deferens calcification is unknown, the management of the condition is also unknown but often the treatment may be targeted at the underlying pathology [7].

SV calcification in DM is usually bilateral and symmetrical mural calcification; tell-tale sign, presenting with hematuria, dysuria, hematospermia and flank pains [4,8].

Case Report

This is a fifty-three year-old male who presented for retrograde urethrocytography (RUCG) on account of frequent micturition, hematuria, bilateral flank pains and hematospermia.

This patient is not diabetic, not a known hypertensive patient, no history of infertility and had no features of renal derangement as at the time of this case report.

The RUCG showed a urinary bladder calculus, calcified tubular vas deferens and seminal vesicles bilaterally on the preliminary films (Figure 2). The contrast films showed complete urethral patency with normal anterior urethra (Figure 1). Complimentary pelvic ultrasonography showed normal renal tracts bilaterally with bladder calculus and minimal prostatic enlargement of about 40mls in volume.

A diagnosis of idiopathic bilateral seminal vesicle and vas deferens calcification was made in a patient with bladder calculus and lower urinary tract symptoms. The patient was advised to consult a urologist in a tertiary hospital for appropriate care



Figure 1: An RUCG demonstrating urethral patency, bladder calculus with calcified vas deferens and seminal vesicles.



Figure 2: Plain radiographs of the pelvis; anterior-posterior to the left and oblique to the right demonstrating an opaque calculus (right blue arrow), calcified vas deferens (right red arrow) and calcified seminal vesicle (upper blue arrow).

Discussion

Bilateral SV and vas deferens calcification can be idiopathic and often seen in individuals more than fifty years of age, the index case is aged fifty three years of age with bilateral SV and vas deferens calcification of idiopathic etiology thereby conforming to the literature.

Seminal vesicle (SV) calcification especially bilateral is a rare entity especially in the young and most often associated with disease conditions most especially diabetes mellitus^{1,2,3}. The index patient had no symptoms and signs of diabetes mellitus or other related etiologies, thereby not conforming to these literatures.

Bilateral flank pains, hematuria, dysuria and hematospermia are some of the presenting symptoms in patients with SV and vas deferens calcification, the index patient also presented with most of these symptoms, thereby conforming to that stated in most literatures.

Seminal vesicle calcification was first reported in literature in the year 1906 in the American medical literature and reported on plain radiograph in the

year 1946^{2,5,6}. The index case was diagnosed following plain radiographs thereby conforming to these literatures.

The management of SV and vas deferens calcification is also unknown but often the treatment may be targeted at the underlying pathology⁷. The index case presented with urinary symptoms, we advised the patient to seek treatment from a urologist in a tertiary hospital.

Conclusion

Plain radiographs play vital role in the diagnosis of SV and vas deferens calcification in this environment, adequate laboratory and clinical assessment are advised to rule out ailments like diabetes mellitus which happens to be the most common cause of this condition.

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