Frequency of priapism and characterization of its management in patients with erectile dysfunction treatment

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Introduction

Priapism is a condition in which the penis remains erect during four hours or more in the absence of stimulation or after stimulation has ended; a frequent cause is the use of vasoactive agents for the treatment of erectile dysfunction (1). The incidence of priapism in these patients varies, ranging from 0.26% to 10% (2-6).

It is widely known that the inadequate and delayed management of a priapism can generate consequences such as penile fibrosis, Peyronie’s disease or erectile dysfunction (7,8), ischemic priapism causes the blood to remain in the penis for long periods, the blood becomes deprived of oxygen and can cause damage to the penile tissue itself.

Aim

Estimate the frequency of priapisms and characterize its treatment in patients with diagnosis of erectile dysfunction treated with PDE5 inhibitors or intracavernous treatment in a sexual health institution during 2016.

Method

Observational descriptive study. The clinical records of patients with a diagnosis of erectile dysfunction treated during the period between January 1 and December 31, 2016, in a sexual health institution in Colombia, who received oral or intracavernous medication for their disease, were reviewed.

Clinical records with patients who reported priapism were analyzed, data on the incidence, duration, management and evolution of the event were collected, as well as sociodemographic data and clinical antecedents necessary for the characterization of this complication. Patients with incomplete information were exclude.

We estimated absolute and relative frequency for categorical variables, and measures of the central tendency and dispersion for the numerical variables.

Results

During 2016, 5620 patients were treated for erectile dysfunction, 3220 (58%) were managed with oral PDE 5 inhibitors and 2400 (42%) with intracavernous medications. 0.03% of patients treated with oral medications (1/3220) and 2% of patients with intracavernous medications (48/2400) presented priapism.

In patients with priapism, the average age was 48 years (SD 11.33); among the comorbidities, dyslipidemia was found in 10 patients (20.4%), diabetes mellitus in 10 (20.4%), hypertension in 9 (18.3%), coronary disease in 4 (8.1%), Peyronie’s disease in 2 (4 %) and prostate cancer in 2 (4%). 9 patients consumed tobacco (18.3%) and 4 psychoactive substances (8.1%). The average of the baseline IIEF-5 was 12.5 points.

1 patient (2%) presented the priapism secondary to extra institutional penile color doppler with alprostadil 10 mg, 2 patients (4%) during the initial assessment and 46 patients (93.8%) during the treatment. The average priapism duration was 7.9 hours (SD 4.3). 1 patient presented spontaneous remission; the protocol of local measurements was effective to treat the priapism in 19 patients (38.7%), while 27 (57.1%) improved with etilefrine and only 1 required drainage and lavage of corpora cavernosa; none required surgical management. 47 patients (95.9%) were followed up between 6 months and 1 year, of which 4 (8.5%) needed more dose of medication to achieve a complete erection, the rest needed the same dose or less. There was no reported occurrence of corpora cavernosa fibrosis.

Conclusion

The management with local measures or etilefrine is successful and safe to treat patients that present priapism associated with PDE 5 inhibitors or intracavernosal medication treatments, in most cases.