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Priapism Under Risperidone: A Clinical Case Report

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Abstract **Case Report**

Priapism is a painful and prolonged erection (lasting more than 4 hours) occurring in the absence of sexual stimulation. This condition requires emergency intervention to prevent irreversible damage to the corpora cavernosa. Approximately half of drug-induced priapism cases are associated with antipsychotics, particularly those with a high affinity for alpha-1 adrenergic receptors. We report the case of a patient taking risperidone who experienced ischemic priapism. Through this clinical case and in light of recent publications, we discuss, firstly, the pathophysiological mechanisms, risk factors, and therapeutic options for this condition, and secondly, some practical recommendations to prevent the occurrence of neuroleptic-induced priapism.

Keywords: Priapism, antipsychotic, Risperidone.

INTRODUCTION

Priapism is a persistent erection lasting more than 4 hours despite the absence of sexual stimulation. It is a urological emergency, particularly in the case of ischemic priapism, which can lead to fibrosis of the corpora cavernosa and permanent erectile dysfunction if treatment is delayed. Antipsychotics, through their antagonistic activity at α1-adrenergic receptors, have been implicated as a drug-induced cause of priapism, with risperidone among the molecules reported in the literature.

We present the case of a patient who developed priapism while taking risperidone, and, based on the literature, we highlight the pathophysiological mechanisms, management strategies, and therapeutic alternatives for this condition. Finally, due to the seriousness of this adverse effect, and despite its rarity, we urge clinicians to pay particular attention to the possible occurrence of priapism in patients on Risperidone.

CLINICAL VIGNETTE

This is a 29-year-old patient with no known urological history, hospitalized for the management of an acute psychotic episode and started on Risperidone 6 mg/day. On day 5 of hospitalization, the patient presented with a persistent painful erection lasting 6 hours, with no history of trauma, which prompted his transfer to the urology emergency department for evaluation and management. Clinical and radiological examination was consistent with ischemic priapism.

Organic management contributed to the resolution of the urological symptoms with no immediate complications, and urological follow-up was scheduled (assessment to evaluate erectile function recovery). From a psychiatric perspective, discontinuation of Risperidone was justified given the absence of any probable cause of the priapism, and a changé in medication was discussed. The final choice was to start him on amisulpride 600 mg/day, and the outcome was favorable.

DISCUSSION

Antipsychotic-induced priapism is rare but has been documented for several decades. The most frequently proposed pathophysiology is the blockade of α1-adrenergic receptors in the corpora cavernosa, leading to a decrease in sympathetic tone necessary for venous return.

Several risk factors have been identified: polypharmacy is implicated in approximately 25 to 40% of priapism cases [1] (particularly when used in combination with other drugs with alpha-1 antagonist activity), and a personal history of priapism (risk of recurrence). Hematological disorders (sickle cell disease, coagulation disorders) are also risk factors. [2]

Several drug classes are involved: antidepressants, antihypertensives, anticoagulants, alpha-blockers, and certain psychoactive substances (alcohol, cocaine, cannabis, etc.) [3]. However, approximately half of drug-induced priapism cases involve antipsychotics. [4]

The challenge facing clinicians in this situation is choosing an alternative antipsychotic (AP). Few authors have focused on the alternatives available for these patients. An American study of 144 cases of AP-induced priapism indicated a relationship between the degree of affinity for alpha-adrenergic receptors of APs and the occurrence of priapism [7]. Amisulpride is currently the only molecule marketed in Morocco and several other countries that lacks alpha-adrenergic affinity, while chlorpromazine and risperidone have the highest affinity (Table 1) [5].

Table: Degree of relative affinity of certain antipsychotics for alpha-1 adrenergic receptors [6]

Antipsychotic	**Affinity**
Amisulpride	—
Olanzapine	++
Clozapine	+++
Halopéridol	+++
Quétiapine	+++
Rispéridone	++++
Chlorpromazine	++++
Aripiprazole is said to have an intermediate affinity [7]	

In our case, the use of amisulpride resulted in psychiatric stability while preventing further episodes of priapism. Other therapeutic alternatives have been published for cases similar to ours, including the combination of clozapine and amisulpride to achieve both antipsychotic efficacy and safety with regard to priapism [6]. Another option would be electroconvulsive therapy (ECT), which could be an interesting alternative if the psychotic symptoms are severe or debilitating, but to date, it has not been mentioned in the literature [5].

This article offers some practical considerations for clinicians to prevent antipsychotic-induced priapism: systematically inquire about a history of priapism before initiating antipsychotic treatment, and if available, choose those with lower alpha-1 adrenergic affinity, in coordination with a urologist. Inform the patient and family of the risk, however rare, and emphasize the importance of actively monitoring any complaint of prolonged erection lasting more than four hours and referring them to the urological emergency department. Finally, the use of ECT remains an alternative to be discussed.

Conclusion

Priapism associated with risperidone is a rare but serious complication requiring rapid recognition and urgent urological management. The likely mechanism involves α1-adrenergic blockade. Collaboration between psychiatrists and urologists is essential for immediate therapeutic management and long-term follow-up.

References

1. Penaskovic KM, Haq F, Raza S. Priapism during treatmentwith olanzapine, quetiapine, and risperidone in a patient withschizophrenia: a case report. J Clin Psychiatry 2010;12 (5). PCC. 09l00939.
2. Razali Salleh M, Mohamad H, Zainol J. Unpredictable neuroleptics induced priapism: a case report. Eur Psychiatry 1996;11(8):419—20.
3. Giuliano F, Droupy S. La iatrogénie médicamenteuse en méde-cine sexuelle. Prog Urol 2013;23(9):804—10.
4. Wang CS, Kao WT, Chen CD, et al. Priapism associated withtypical and atypical antipsychotic medications. Int Clin Psy-chopharmacol 2006; 21:245_8.
5. J. Doufik, Y. Otheman *et al.*,Priapisme sous antipsychotiques et défis de prise en charge: à propos d'un cas. L'Encéphale (2014) ENCEP-670; No. of Pages 4
6. Sinkeviciute I, Kroken RA, Johnsen E. Priapism in antipsychotic drug use: a rare but important side effect. Case Rep Psychiatry 2012; 2012:496364.
7. Rosenberg I, Aniskin D, Bernay L. Psychiatric treatment of patients predisposed to priapism induced by quetapine, trazadone and risperidone: a case report. Letters to the editor. Gen Hosp Psychiatry 2009; 31:97—8.