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ANALYSIS OF PHAR- MACOTHERAPEUTIC TREATMENT IN AUTISM SPECTRUM DISORDER

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INTRODUCTION

Autism spectrum disorder (ASD) is a neuropsychiatric disorder that develops in early childhood, with a conclusive diagnosis between the ages of 4 and 5. It is characterized by communication and socialization difficulties, restricted and repetitive behavioural patterns and interests. It has variable severity and presentation, usually presenting anxiety, irritability and aggression disorders, and can be associated with various comorbidities, the most prevalent being attention deficit hyperactivity disorder (ADHD), sleep disorders and epilepsy.

In order to make the most appropriate pharmacotherapeutic choice for patients with ASD, the diagnosis must be solid and the symptoms properly understood, since the drugs have different mechanisms of action. Methylphenidate, risperidone, fluvoxamine, venlafaxine, levetiracetam and zolpidem are used in the majority of ASD cases, as they treat more recurrent symptoms and the comorbidities present. The importance of adequate pharmacotherapy is based on improving the patient's quality of life, alleviating agitated behavior, stereotypes and other signs and symptoms, as well as reducing possible adverse reactions and achieving optimal medication adherence to improve prognosis.

OBJECTIVES

To analyze the use of different drugs in patients with ASD, identifying their effects in reducing signs and symptoms.

METHODS

A narrative literature review was carried out using scientific articles in English, Spanish and Portuguese, published between 2019 and 2023, available on the ScienceDirect, PubMed and Scielo databases.

RESULTS

The studies showed a wide variety of psychotropic drugs used to treat ASD and its comorbidities. Studies have shown that methylphenidate promoted a clinical response in 49% of patients with ASD and ADHD, also reducing hyperactivity in 25% (n=82), although irritability worsened. Trials with lithium in adolescents showed an improvement of 44% (n=30), mainly manic/euphoric symptoms, with the problem of monitoring lithemia. A study of 48 children, after 24 weeks of treatment with risperidone, in which half the patients received placebo (control) and the other half risperidone, showed that 67% of the control group relapsed, while only 25% of the treated group relapsed, with drowsiness, fatigue, increased appetite and weight gain being the most recurrent complaints. A study of 158 adolescents taking fluoxetine showed no improvement compared to placebo, unlike fluvoxamine, which after 12 weeks (n=30) showed a significant improvement in repetitive behavior and aggression. Despite their recurrent use, no studies were found with representative results for ASD patients taking zolpidem and melatonin for sleep disorders; levetiracetam, valproate and other anticonvulsants for seizure episodes; venlafaxine and other serotonin and noradrenaline reuptake inhibitors.

CONCLUSION

The drugs methylphenidate, risperidone and fluvoxamine showed the best results in most of the studies analyzed in this review, with a reduction in hyperactivity, manic/euphoric symptoms, repetitive behaviors and aggression. Other drugs, such as Zolpidem, melatonin, levetiracetam, valproate and venlafaxine were frequently cited, but without representative results in ASD.