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BILATERAL STELLAR CATARACT DUE TO PROLONGED USE OF CHLORPROMAZINE

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INTRODUCTION

Opacification of the lens can occur due to several causes and risk factors. With the increase in the chronic use of medications, cataracts related to these drugs are gaining prominence in terms of their worldwide prevalence and knowing what they are is of vital importance in medical practice.

Chlorpromazine, a phenothiazine derivative, is a medication widely used in psychiatry to treat psychosis, especially in cases of schizophrenia.

Since 1964, there have been published articles correlating the use of this medication with the appearance of ocular changes. The leaflet recommends regular ophthalmological and hematological control in various forms. In addition to being clear as a reaction whose frequency is unknown, pigmentary deposits in the anterior segment of the eye.

OBJECTIVE

Reinforce the importance of periodic ophthalmological monitoring in chronic users of chlorpromazine to screen for ocular changes.

CASE DESCRIPTION

A 49-year-old woman attended the outpatient clinic of Hospital de Olhos do Paraná complaining of progressive low visual acuity in both eyes (AO) for 2 years, which worsened in a bright environment. Diagnosed with schizoaffective disorder 27 years ago. Using: chlorpromazine for 25 years and currently also using biperiden.

When asked about the dosage of chlorpromazine used, the patient stated that the prescribed dosage had already been lower at the beginning of treatment and higher in some periods, but that it had been reduced to 400mg/day in the last 10 years. The dosage of biperiden was 4mg/day. There was no ophthalmological, pathological or surgical history.

On ophthalmological examination:

Visual acuity (VA) with correction: 20/50 right eye (RE); 20/70 left eye (LE).

A.O. biomicroscopy: brownish pigments dispersed in a star shape in the anterior crystalline lens.

A.O. gonioscopy: open 360o to the iris root, pigmentation 1+.

Intraocular pressure and retinal mapping: no particularities.

Photo: stellar cataract taken by the author.

After evaluation complete ophthalmological examination and ruling out other causes of the deposits, cataract secondary to the use of chlorpromazine was diagnosed.

DISCUSSION

Unlike other reports that patients are typically older, in this work, we report the case of a 49-year-old patient with ocular repercussions due to long-term therapy with chlorpromazine.

Biomicroscopy of both eyes showed central anterior subcapsular brown deposits in a starry pattern on the lens similar to other case

reports.

The dosage of medications containing Chlorpromazine Hydrochloride has a large safety margin, and the dose can vary from 25 to 1600 mg per day, depending on the patient's needs. Considering this patient's daily dose of chlorpromazine of 400mg for 25 years used by the patient, the total amount during his life exceeds 2,000g (dose considered significant for the ocular changes described). Another relevant factor is the time of use, which reaches 25 years, which is relevant.

A study carried out at the Prof. Psychiatric Hospital. Adauto Botelho (Goiânia, GO), shows a series of 20 cases that the time of medication use is an extremely important factor in the development of stellate cataracts.

Patients who make prolonged use of phenothiazines, drugs used in the treatment of schizoaffective psychoses, are considered mandatory to be monitored by an ophthalmologist. As in the case presented, changes in the lens frequently appear after prolonged use of chlorpromazine, and are commonly described as brownish pigmented deposits at the level of the capsule and/or anterior lenticular subcapsule, in the pupillary area, which is characteristically shaped like a star. They can also affect the conjunctiva, cornea, iris and retina.

The impairment of visual acuity is variable, as observed in the case, in which despite both eyes presenting the same ocular manifestation, the visual impairment is asymmetric. In this case, treatment is exclusively surgical. It is worth highlighting that if the cataract diagnosis had been made before visual acuity worsened and perhaps the treatment of the patient in question had changed, the outcome of the case could have been different.

Considering the potential link between chlorpromazine and cataracts and the existence of other possibilities for treating schizophrenia, doctors must weigh the benefits of the medication against the risk of ocular side effects, paying attention to the time of exposure to the drug and its dosage. Since prolonged use of this drug can result in significant ocular changes.

CONCLUSION

The case presented reinforces the importance of periodic ophthalmological monitoring of chlorpromazine users to screen for ocular changes, paying attention to the time of exposure to the drug and its dosage.

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