

MICROPHACY AND ANTERIOR SYNECHIA OF CILIAL PROCESSES IN A CAT: CASE REPORT

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Abstract: Microphakia is defined as a reduced lens size and generally correlates with other ocular malformations. The objective is to report a case of bilateral congenital lens alteration. The patient, a two-year-old mixed breed cat, presented ocular opacity in both eyes. The animal was submitted to an ultrasonic biomicroscopy (UBM) imaging examination, where anterior dislocation of the lens with cataract and slight narrowing of the irideocorneal angle was confirmed in the right eye. In the left eye, the lens was not observed, confirming aphakia, in addition to observing the ciliary processes attached to the inner portion of the cornea. To date, this is the first report of anterior synechiae of the ciliary processes in a visual aphakic eye in a cat.

Keywords: Key words: microphakia, anterior lens dislocation, UBM.

INTRODUCTION

Congenital ocular malformations present in dogs and cats are rare, and are classified as such because they are present at birth, after opening the eyes or even until the sixth and eighth week of life (ECVO HED, 2017). Microphakia, which is part of congenital malformities, is defined as a reduced size lens and is generally correlated with other ocular malformations, due to disorganization of the optic vesicle during the structuring phase of the neural plate. The same origin refers to Aphakia, which is the absence of a lens and is also associated with various ocular changes (Herrera, 2008).

GOAL

The objective is to report a rare case of bilateral congenital lens alteration in a visual cat.

CASE REPORT / METHODOLOGY

The patient, a two-year-old mixed breed cat, presented ocular opacity in both eyes. On ophthalmic examination, a cataract, anterior dislocation of the lens and microphakia with ciliary processes adhered to the lens were observed in the direct eye (figure 1). In the left eye, aphakia was noted, cicatricial leukoma of the cornea with adhesion of the ciliary processes, generating anterior synechiae of the ciliary processes (figure 2).



Figure 1 - Microphakia and anterior lens dislocation.



Figure 2 - Aphakia, leucoma and adherence of the ciliary processes to the cornea.

Intraocular pressure values were within normal limits, in addition to the pupillary reflex and bilateral positive threat response. The animal was subjected to an ultrasonic biomicroscopy (UBM) imaging examination, which confirmed, in the right eye, anterior

dislocation of the lens with cataract and slight narrowing of the irideocorneal angle (figure 3). In the left eye, the lens was not observed, confirming aphakia, in addition to observing the ciliary processes attached to the inner portion of the cornea (figure 4).

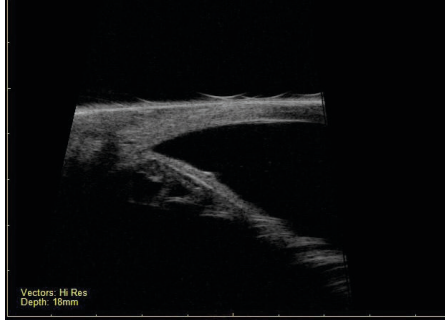


Figure 3. Anterior lens dislocation (UBM)

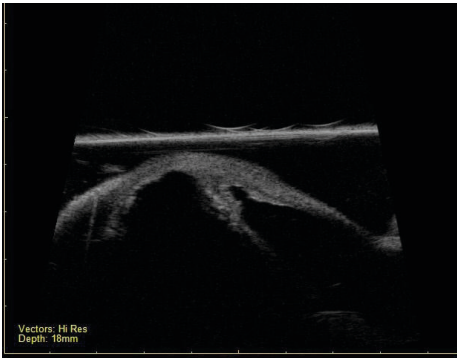


Figure 4. Ciliary processes attached to the cornea

CASE EVOLUTION/RESULTS

Eye drops based on Dorzolamide 2% and Prednisolone 1% were prescribed until further recommendations, as a narrowing of the irideocorneal angle, responsible for draining the aqueous humor, was identified by the UBM. After two fortnightly returns showing stability in the situation, tutors were advised to undergo quarterly monitoring.

CONCLUSION

It is reported in the literature that, in addition to being rare, microphakia is associated with other congenital diseases, such as microphthalmia and cataracts (Delgado, 2020), the latter present in the patient in the present case. To date, this is the first report of anterior synechiae of the ciliary processes in a visual aphakic eye in a cat.

REFERENCES

- ECVO Manual for Presumed Inherited Eye Diseases in Dogs and Cats (2017).
- Oftalmologia Clínica em Animais de Companhia (Daniel Herrera, 2008).
- Congenital ocular malformations in dogs and cats: 123 cases (Delgado E.; Saraiva Q. I., 2020).