

ACBA: Health

CATARACTS IN CAVIES

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A cataract by definition is an opacity of the lens of the eye. The lens of the eye consists of layers of proteins and is normally transparent. When certain changes occur in the fluid of the eye, the chemical makeup of these proteins is affected and the transparent nature is altered, resulting in cataract formation. A cataract appears as a white "disc" within the eye or as white portions of the disc-shaped lens. Some light recognition may be maintained even with complete cataracts, and some sight is maintained with partial cataracts.

Cataracts should not be confused with opacities or changes in the cornea. A cataract will appear to be deeper in the eye. Corneal opacities may be white or bluish in color but occur on the surface of the eye. Many clinical conditions can result in cataracts. Cataract formation in cavies tends to be rare (I found very few references to cataracts in cavies). The most common reports of cataracts were as a result of trauma, metabolic disease, or by inheritance.

In the cases of inherited cataract formation, the cataract may be present at birth (congenital), form at 9-10 months, or at 2-3 years of age. They may form in one or both eyes. The mode of inheritance is unclear but it is obviously not recommended to keep these animals in a breeding program. (I have personally seen partial cataract formation occur in a group of 7- 10 day old American babies- generally related- that resolved/resorbed by 21-25 days of age.

It also occurred in an unrelated Peruvian baby. In all cases, no cataracts occurred later in life or in subsequent generations.)

Certain metabolic conditions can result in cataract formation. Diabetes mellitus would be the most common cause, but certain drugs and toxic metabolites could also cause the chemical changes in the lens proteins that lead to opacity.

In our experience, the most common cause of cataract formation in cavies is trauma. Penetrating ocular punctures or lacerations may often result in damage to and development of opacity in the lens. Blunt force (such as with a fall) can cause bruising or swelling which also may result in cataract formation. Occasionally, the lens may also luxate, or slip out of its normal position. The change of position can affect (slow or stop) the normal drainage of the eye and result in glaucoma.

Although cataracts seem to be rare in cavies, they may be inherited or can occur as a result of metabolic or traumatic changes. Determining the cause of the cataract will help in deciding whether or not the animal should be maintained in the breeding program. Occurrence of an isolated incident of cataract formation of unknown origin does not necessarily mean the animal should be culled but may alert the breeder to an unforeseen problem.

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