

ANISOCORIA

(UNEQUAL PUPIL SIZE)

BASICS

OVERVIEW

- The pupil is the circular or elliptical opening in the center of the iris of the eye; light passes through the pupil to reach the back part of the eye (known as the “retina”); the iris is the colored or pigmented part of the eye—it can be brown, blue, green, or a mixture of colors
- The pupil constricts or enlarges (dilates) based on the amount of light entering the eye; the pupil constricts with bright light
- “Anisocoria” is an inequality of pupil size in the animal (in other words, one pupil is larger than the other)

SIGNALMENT/DESCRIPTION of ANIMAL

Species

- Dogs and cats

SIGNS/OBSERVED CHANGES in the ANIMAL

- Unequal pupils
- May have other signs, based on the underlying cause

CAUSES

Nervous System Disorders

- Disease affecting nerves to eye (the optic nerve, optic tract, and oculomotor nerve) or part of the brain (known as the “cerebellum”)

Ocular (Eye) Disorders

- Inflammation of the front part of the eye, including the iris (known as “anterior uveitis”)
- Disease of the eye, in which the pressure within the eye is increased (known as “glaucoma”)
- Decrease in iris tissue (known as “iris atrophy”) or poorly developed iris (known as “iris hypoplasia”)
- Scar tissue between the iris and the lens of the eye (known as “posterior synechia”); the lens is the normally clear structure directly behind the iris that focuses light as it moves toward the back part of the eye (retina)
- Medications (such as atropine applied to only one eye, causing that pupil to enlarge or dilate)
- Cancer
- Spastic pupil syndrome—condition in which pupils alternatively will be unequal in size and then normal in size; may be associated with feline leukemia virus (FeLV) infection in cats

TREATMENT

HEALTH CARE

- Depends on underlying disease

MEDICATIONS

- Depends on underlying disease

FOLLOW-UP CARE

PATIENT MONITORING

- Depends on underlying disease

PREVENTIONS AND AVOIDANCE

- Depends on underlying disease

POSSIBLE COMPLICATIONS

- Depends on underlying disease

EXPECTED COURSE AND PROGNOSIS

- Depends on underlying disease

KEY POINTS

- The pupil is the circular or elliptical opening in the center of the iris of the eye



- “Anisocoria” is an inequality of pupil size in the animal (in other words, one pupil is larger than the other)

