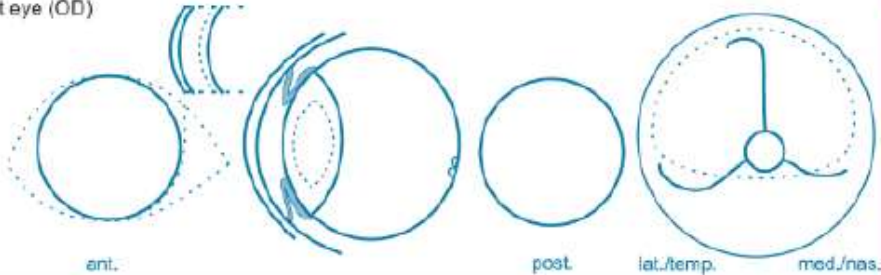




**PK-HED cataracts:
definitions, guidelines, vet advice (2024)**

Marianne Richter, Dipl. ECVO
HED-committee chair

Right eye (OD)



ant. post. lat./temp. med./nas.

Descriptive comments

clinically less relevant KP hereditary cataracts

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICAA : P/A

- ☐ mild
- ☐ moderate
- ☐ severe
- ☐ narrow (moderate)
- ☐ closed (severe)

ICA

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases

	UNAFFECTED	suspicious/ undetermined	AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> cornea <input type="checkbox"/> lens <input type="checkbox"/> lamina
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macoblepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

* "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is

** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are in

*** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the

FOR FURTHER INFORMATION: P.T.O. Examiner

clinically relevant KP hereditary cataracts

Cataract: is an opacity (generally whitish) in different shapes and sizes in the lens nucleus, cortex or capsule; it is resulting from pathologic changes in lens protein composition or disruption of lens fiber arrangement;

clinical significance: The clinical significance is influenced by the extent, density and location of the opacity, as well as its potential to progress, which leads to scattering of incident light, reduced illumination, reduced contrast sensitivity, increased glare, degraded color vision, and loss of visual acuity and visual function.

Classification according to aetiology:

- **Primary cataracts:** all bilateral or unilateral cataracts and especially cortical cataracts are known or presumed hereditary eye diseases (KP-HED; except secondary cataracts)
- **Secondary cataracts:** cataracts known to be caused by physical influences (trauma, electric, irradiation), ocular inflammation, metabolic diseases, nutritional deficiencies, age, intoxication or another KP-HED (i. e. attachment point of PPM, PHA or as part of PHTVL or sequelae of PRA) should NOT be ticked as KP-HED «cataract» but should be mentioned in the comment field: “secondary cataract – non-hereditary”.

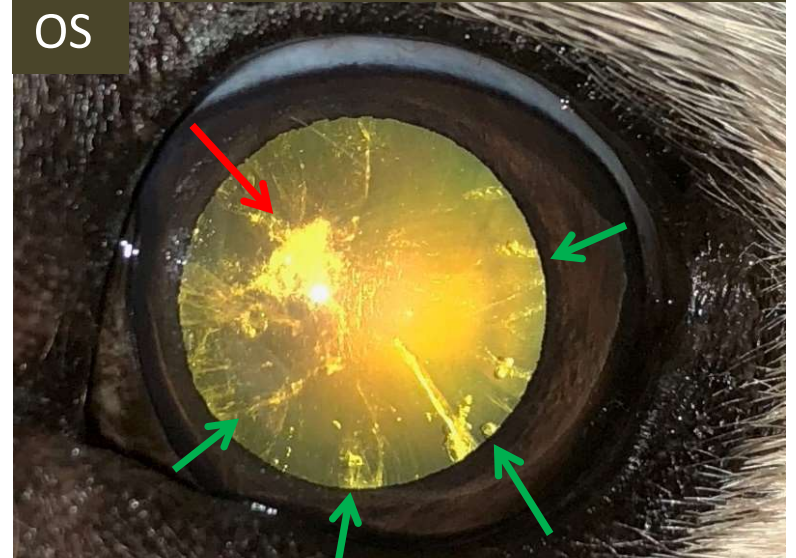
primary versus secondary cataracts

Secondary cataracts: cataracts known to be caused by physical influences (trauma, electric, irradiation), ocular inflammation, metabolic diseases, nutritional deficiencies, age, intoxication or another KP-HED (i. e. attachment point of PPM, PHA or as part of PHTVL or sequelae of PRA) should **NOT be ticked as KP-HED «cataract» but should be mentioned in the comment field** (as it is not a primary cataract, but a consequence of another disease).

Slides: F. Matheis

Marianne Richter, Dipl ECVO

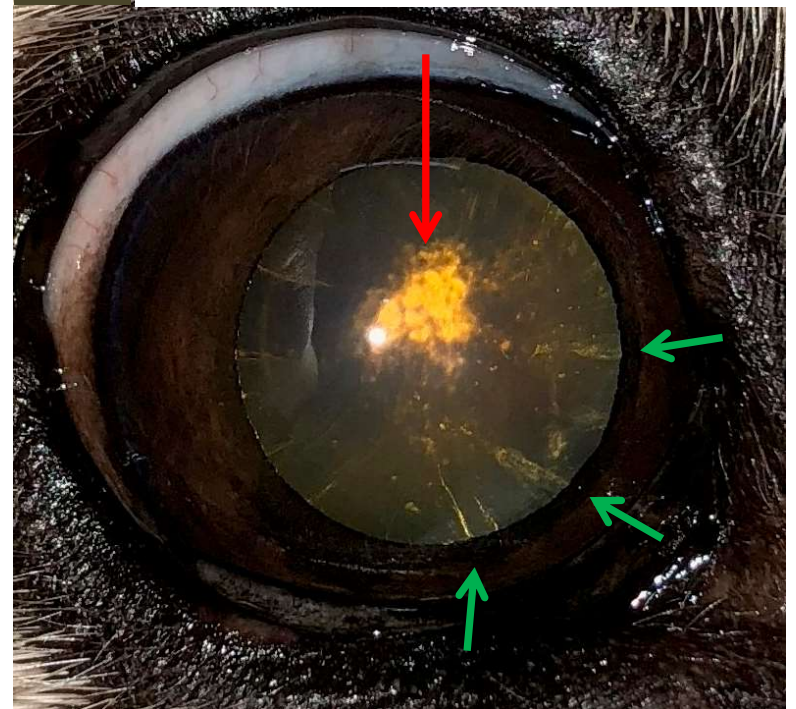
Golden Retriever, 8y, m; PRA
OS



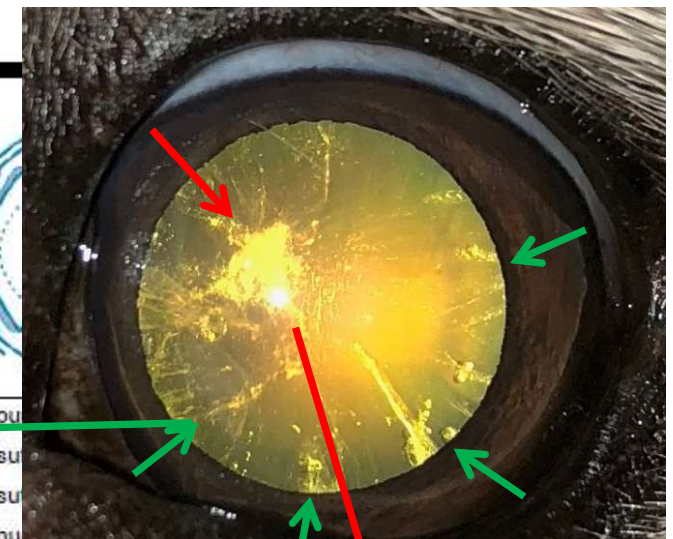
cortical cataract secondary to PRA

OD

post. polar cataract (KP-HED)



- Posterior polar cataract (KP-HED): 15. Cataract (later onset) – post. pol. «affected»
- Spoke-like cortical cataracts associated with PRA: descriptive comment



Descriptive comments

Cortical cataract secondary to PRA

15. Other lens opacity:

- ☐ posterior (posterior pole)
- ☐ subcapsular
- ☐ subequatorial
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent
- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no:

☐ Severe

Results for the known or presumed hereditary eye diseases

	UNAFFECTED	suspicious/ undetermined	AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> cornea <input type="checkbox"/> lens <input type="checkbox"/> lamina
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macrobopharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

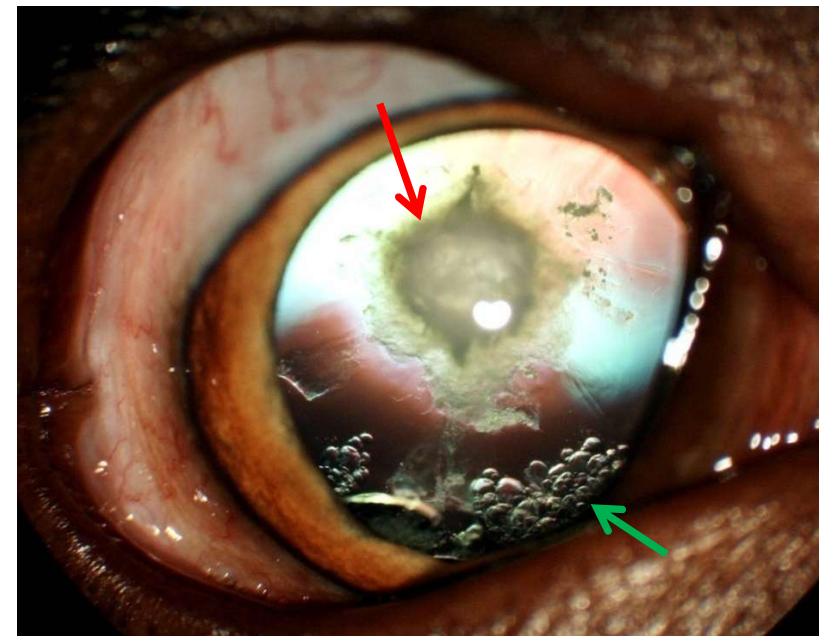
FOR FURTHER INFORMATION: P.T.O.

Examiner

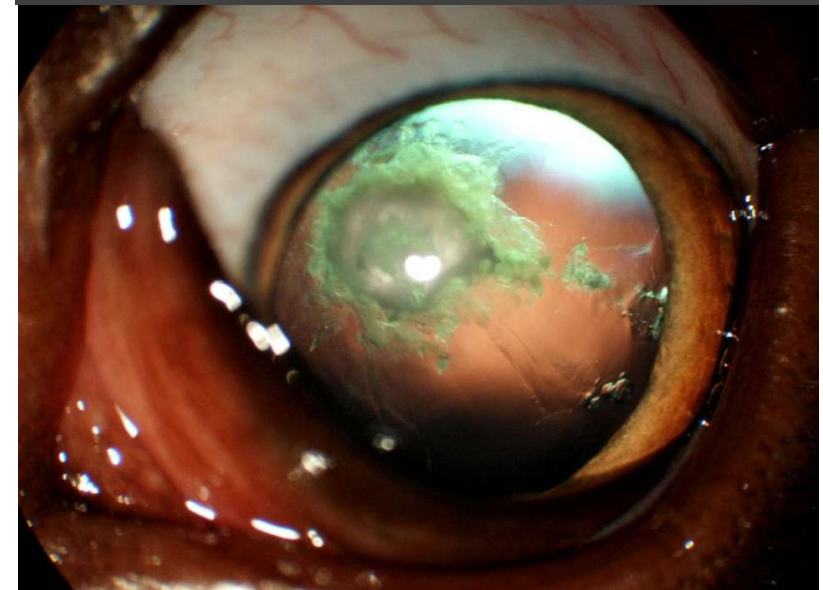
Cataract (congenital)

Congenital cataracts: If cataracts are observed in the period between birth and the 8th week of age the entity is ticked “affected” at “3. Cataract (congenital)”; if diagnosed later in life but there is **distinct indication the cataract is congenital in origin** (e. g. in microphthalmos, adjacent to PPM, or PHA) the entity is ticked “affected” at “3. Cataract (congenital)”, except in PHTVL/PHPV, where the cataract is part of the entity. If there are also **signs of juvenile or adult cataract (e. g. post. pol. or cortical cataract)** not adjacent to the insertion of the PPM or PHA) also tick “affected” at “15. Cataract (non-congenital)”.

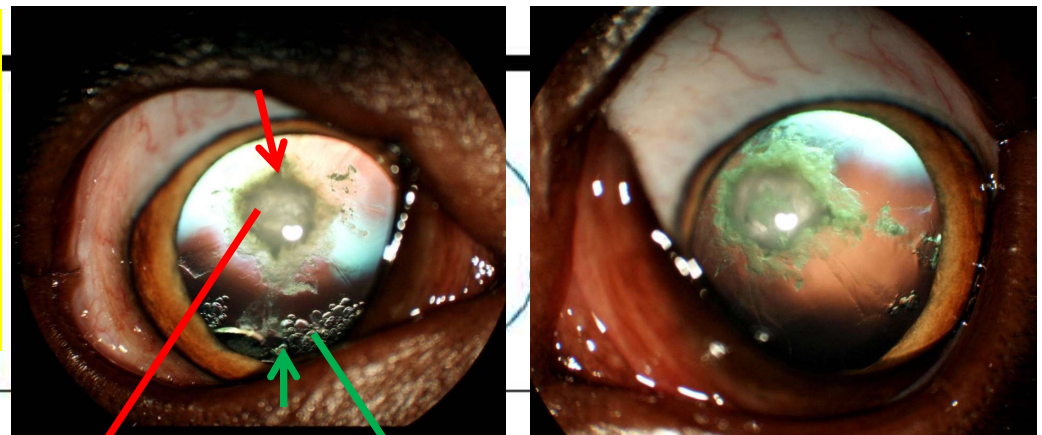
Slides: P. Benz



Labrador Retriever, 1y6m, m, bilateral microphthalmus, nuclear + cortical cataracts



- Microphthalmus, nuclear cataract (KP-HED): 7. Other: Microphthalmus, 3. Cataract (congenital) «affected»
- cortical cataracts (KP-HED): 15. Cataract (later onset) – cortical «affected»



Labrador Retriever, 1y6m, m, bilateral microphthalmus, nuclear + cortical cataracts

Eye disease no:

☐ Severe

Results for the known or presumed hereditary eye diseases

	UNAFFECTED	suspicious/ undetermined	AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> int. lens <input type="checkbox"/> cornea lamina
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other: Microphthalmos	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

15. Cataract (later onset):

Classification according to location:

- **Cortical cataracts:** any opacity in the anterior and/or posterior cortex unilateral or bilateral (except the posterior polar cataract and those listed under “other”)
- **Posterior polar cataract:** is a subtype of the cortical cataract, it presents as a distinctive triangular (sometimes discoid) plaque situated in the central posterior cortex, in general adjacent to the posterior capsule. ...
- **Nuclear cataracts:** any whitish opacity in the nucleus; exceptions: fiberglass like and pulverulent cataracts (see other lens opacities)

To describe the type of cataract, at 15. cataract (later onset) the box “affected” and the specifying box for the type of cataract are to be ticked.

- **Other lens opacities:**

Certain lens opacities can occur frequently in a certain breed of dog (therefore presumed hereditary), but are considered regarding breeding “optional” or of low priority because they usually remain clinically less relevant. These opacities vary in size, location and transparency: some opacity is whitish but very small (e. g. punctate, suture line tips, suture line), others are almost transparent but more extensive (e. g. fiberglass like or pulverulent, nuclear ring).

Clinical significance: these lens opacities usually remain unchanged or limited and have no clinically relevant effect on vision.

These lens opacities are summarized and specified in the comment field under “15. “other lens opacity”: punctate, suture line tips, suture line, nuclear ring, fiberglass-like/pulverulent

Indicate in the comment field at “15. Other lens opacities” the corresponding subtype. At “15. Cataract (later onset)” the box "unaffected" is ticked.

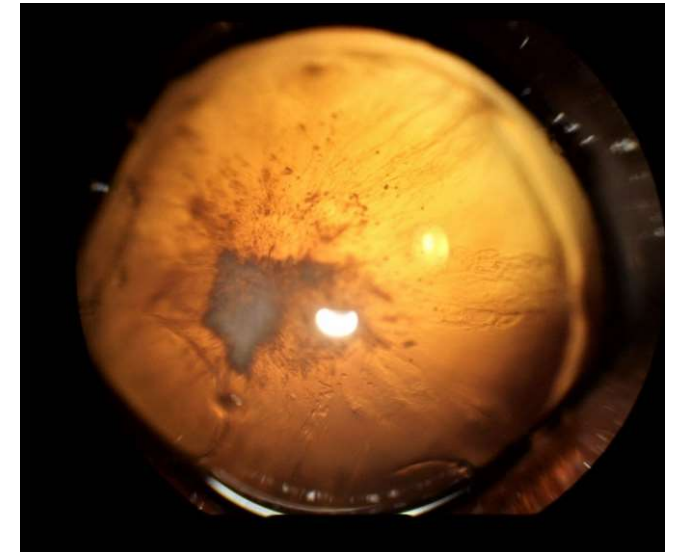
Cortical cataracts: any opacity in the anterior and/or posterior cortex unilateral or bilateral (except the posterior polar cataract and those listed under “other opacities”)



English Cocker Spaniel,
4y4m, m, **bilateral**



English Cocker Spaniel,
1y5m, f, **unilateral**



Miniature Poodle, 4y5m, f,
unilateral

Slides: M.Richter

Slide: G. Chaudieu

Right eye (OD)

ant. post. lat./temp. med./nas.

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe

ICA

- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macoblepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

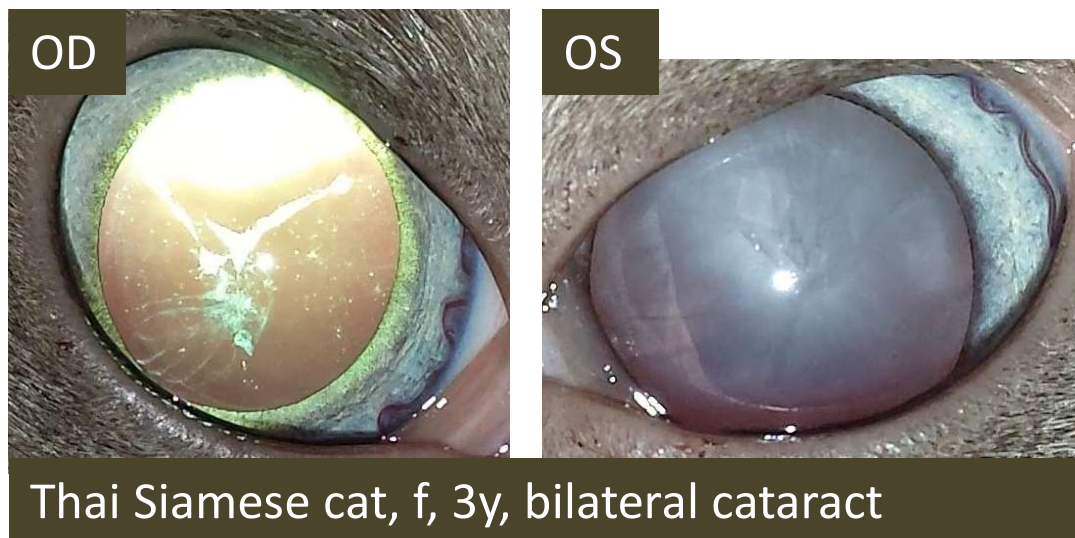
- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Total cataract

In a **total/mature cataract (defined as cortical and nuclear cataract)**: in case of congenital cataract, tick at "3. Cataract (congenital) the box "affected"; In case of **cataract (later onset)** tick at "15. Cataract (later onset)" the boxes "affected" and the specifying boxes "cortical" **AND** "nuclear";
tick at "7. Other" and "18. Other" the box "affected" and write or use (drop-down menu in the online form): "Posterior segment exam not possible".



Slides: M.Richter

Posterior segment exam not possible (e.g. total/mature cataract): relevant boxes (at 2.,4., 5., 6. and 17.) remain empty



Thai Siamese cat, f, 3y

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fibreglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe
- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no:

☐ Severe

Results for the known or presumed hereditary eye diseases

	UNAFFECTED	suspicious/ undetermined	AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Post. segment exam not possible

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Post. segment exam not possible

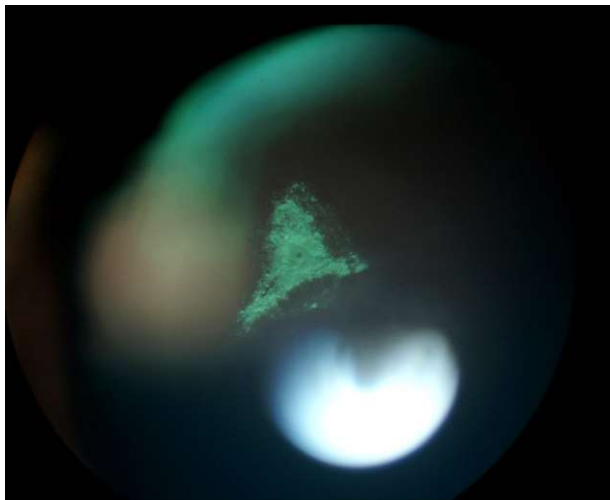
Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

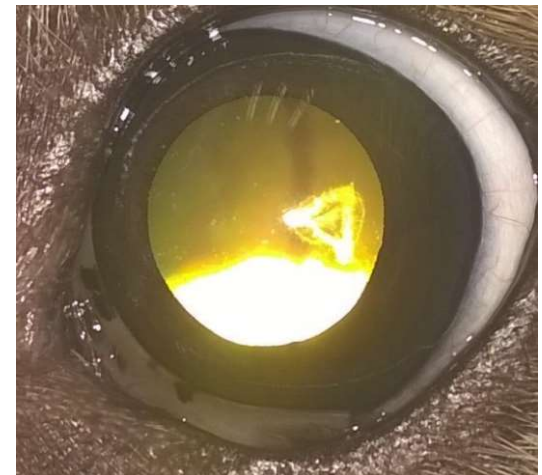
- **Posterior polar cataract:** is a subtype of the cortical cataract, it presents as a distinctive triangular (sometimes discoid) plaque situated in the central posterior cortex, in general adjacent to the posterior capsule. Sometimes there is a smaller satellite rosette lesion adjacent to the central opacity. It can be stationary as well as progressive (progression may begin at any age). In the progressive type, whitish opacification changes take place in the posterior cortex in the form of radiating rider opacity



Labrador Retriever, 3y
(G. Chaudieu)

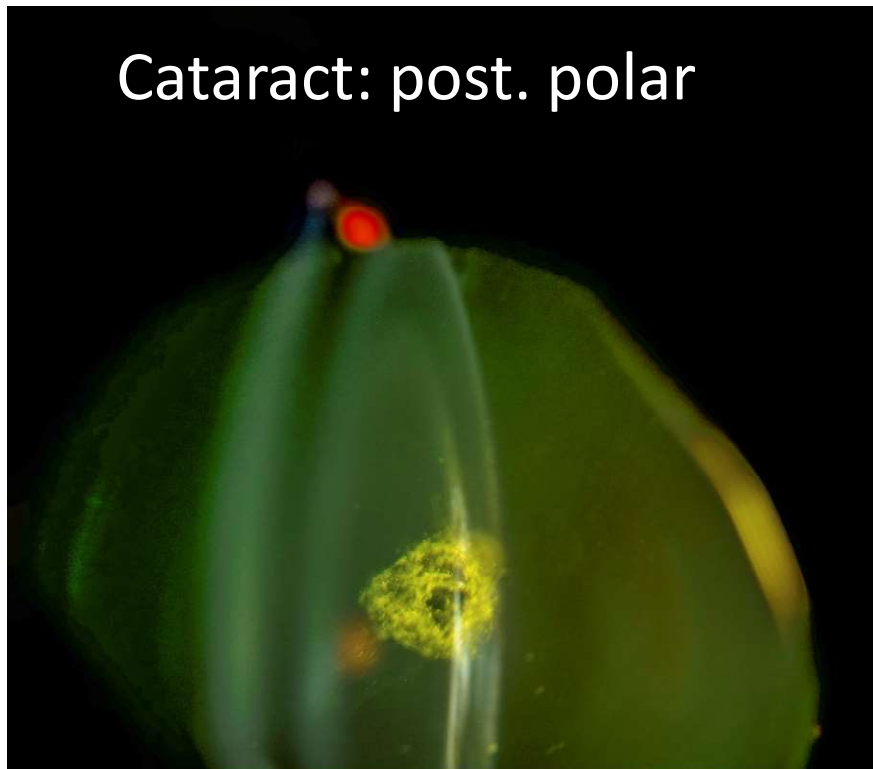


Labrador Retriever, 5y
(L. Karlstam)



Golden Retriever, 6y
(L. Karlstam)

- **Posterior polar cataract:** opacity of typical triangular shape located at the posterior pol of the lens, in the posterior cortex (directly adjacent to the capsule **or** with some distance to the capsule)



Slides: L. Karlstam

If there is a distinct (well defined) post. pol. cataract, without signs of spreading into the remaining cortex, tick at “15. Cataract (later onset)” the box “affected” and the specifying box "post. pol";



Slides: M.Richter

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant.

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

ICA

- ☐ mild
- ☐ moderate
- ☐ severe
- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

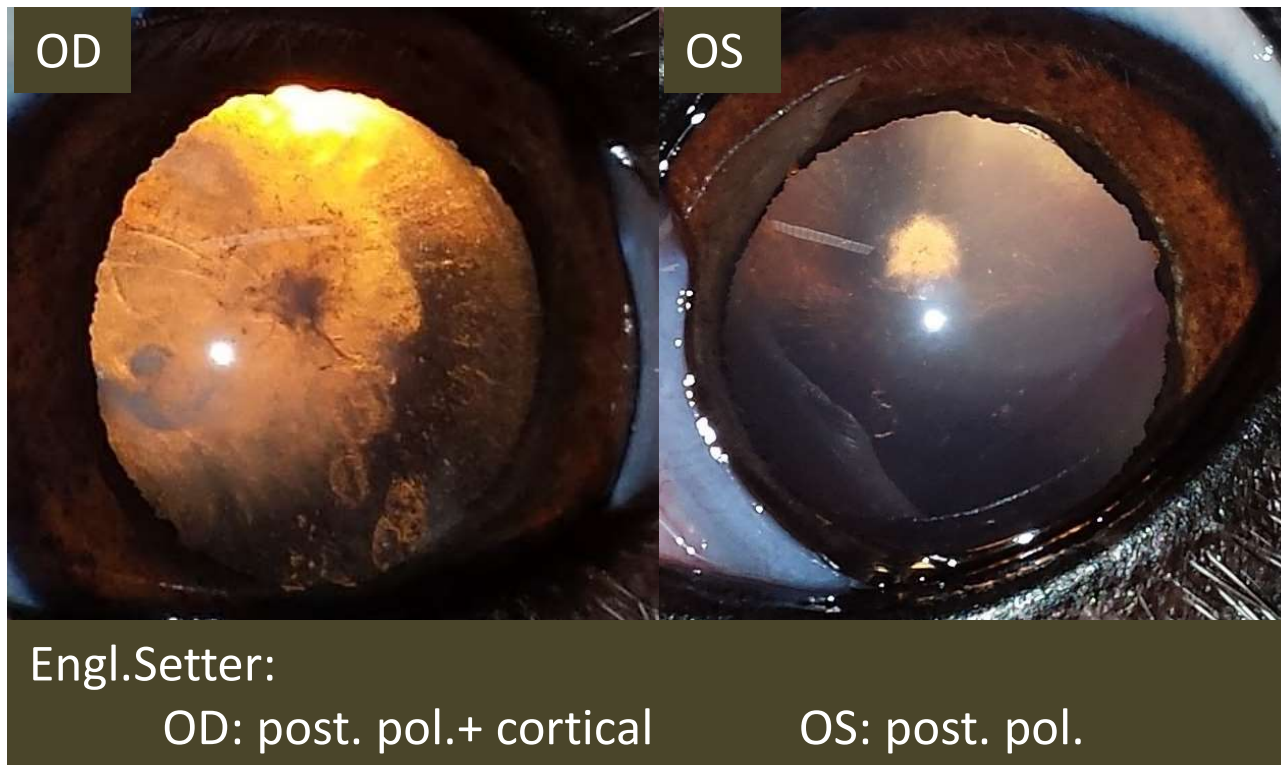
Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

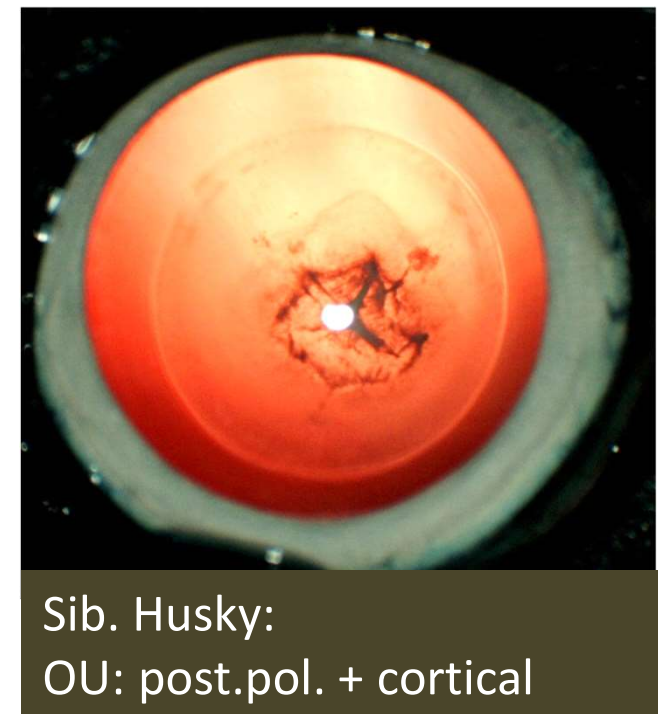
FOR FURTHER INFORMATION: P.T.O.

Examiner

If the post. polar cataract extends into the adjacent cortex (and is therefore progressive), tick at “15. Cataract (later onset)” the box “affected” and the specifying boxes “post. pol.” AND “cortical”;



Slides: M.Richter



Slide: HEDsession Antwerp 2019

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant.

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe

ICA

- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

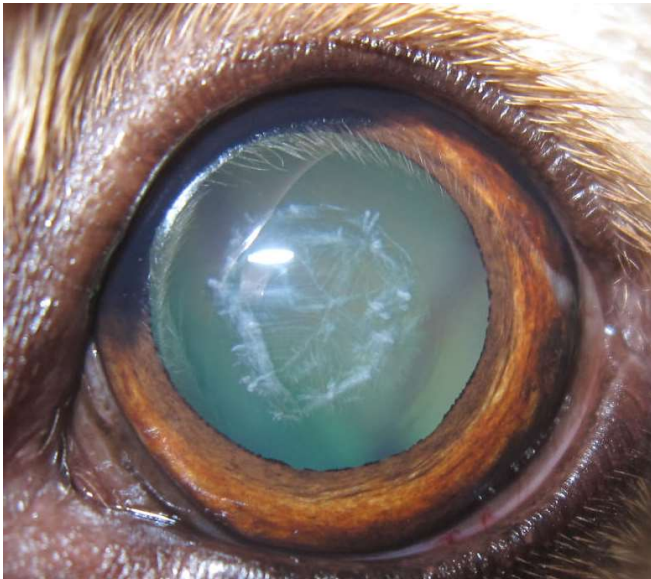
Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

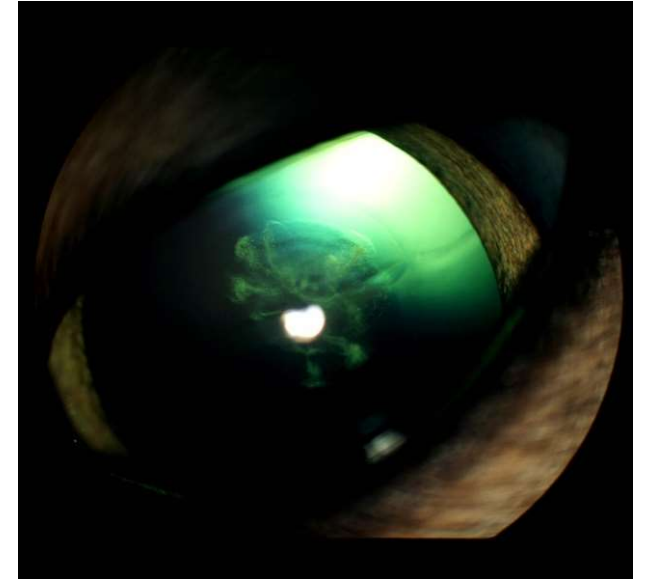
- **Nuclear cataracts:** any *whitish opacity* in the nucleus (embryonal, fetal, juvenile, adult); (*exceptions: fiberglass like and pulverulent cataracts – see other lens opacities*)



Mixed breed, 6y, f, nuclear cataract OS (12.02.2013)



Bengal cat, 2y, nuclear cataract OU



Bengal cat, 1.5 y, nuclear cataract OU

Slides: M.Richter

Slide: G. Chaudieu

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant. post. lat./temp. med./nas.

Descriptive comments

15. Other lens opacity:

☐ punctata
☐ suture line tip
☐ suture line
☐ nuclear ring
☐ nuclear fiberglass/pulverulent

ICA

☐ severe
☐ narrow (moderate)
☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Other lens opacities:

Punctate: one or more *clearly defined* whitish dot like opacities located in the cortex or nucleus

Suture line tips: *clearly defined* whitish small linear opacities at the ends of the suture lines

Suture line: *clearly defined* whitish line or dots in the cortex that form an upright or inverted Y; sometimes faint dotted circular opacities can be seen in its center.

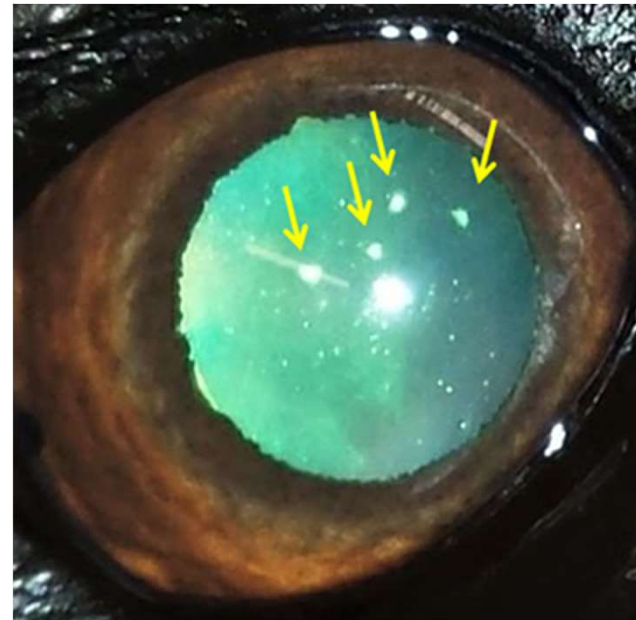
Nuclear ring: *delicate semi-translucent irregular shaped* more or less circular structure in the nucleus

Nuclear fiberglass-like/pulverulent: Fiberglass or crystal-like opacities in the nucleus or scattered fine pulverulent granules parallel to the suture lines in the posterior nucleus and later with fibrillary opacities in the entire fetal nucleus, which may become dense and extending into the adult nucleus. These nuclear opacities are generally bilateral and do not impair vision significantly.

In the case of "other lens opacities": indicate in the comment field at "15. Other lens opacities" the corresponding subtype. At "15 Cataract (later onset)" the box "unaffected" is ticked.

Other lens opacities:

- Punctate: one or more *clearly defined* whitish dot like opacities located in the cortex or nucleus



Slides: M.Richter

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant.

clinically less relevant
KP hereditary cataracts

15. Other lens opacity:

- ☒ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe

ICA

- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases				Results valid for 12 months			
	UNAFFECTED	suspicious/ undetermined	AFFECTED		UNAFFECTED	suspicious/ undetermined	AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens		11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macrodactylarion	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
					18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Interpretation

* "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.

** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.

*** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.
Examiner

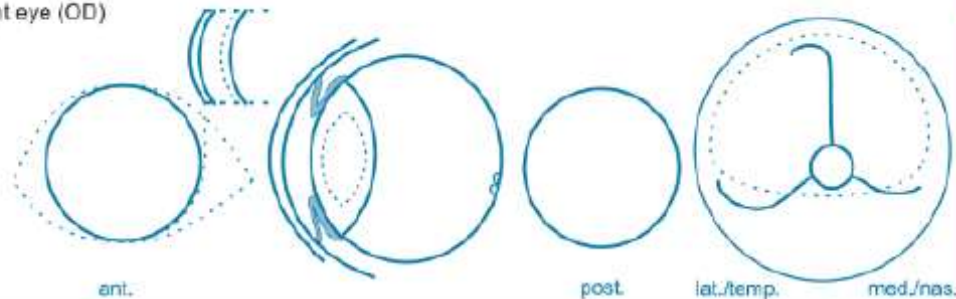
Other lens opacities:

- Suture line tips: *clearly defined whitish* small linear opacities at the ends of the suture lines



Slide: M. Richter

Right eye (OD)



Descriptive comments

Left eye (OS)



clinically less relevant
KP hereditary cataracts



15. Other lens opacity:

- ☐ punctata
- ☒ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICA

- ☐ mild
- ☐ moderate
- ☐ severe
- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no:

☐ Severe

Results for the known or presumed hereditary eye diseases

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> cornea <input type="checkbox"/> lens <input type="checkbox"/> lamina
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	UNAFFECTED	suspicious/ undetermined	AFFECTED
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

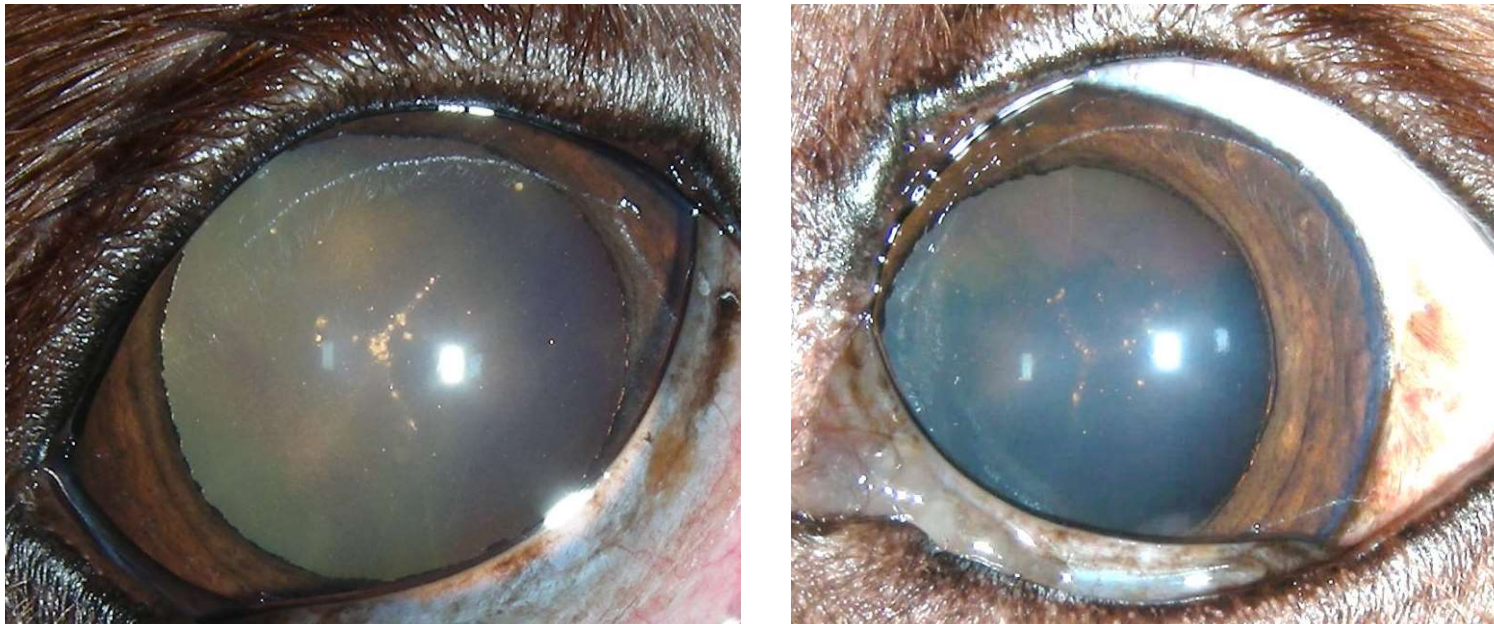
- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Other lens opacities:

- Suture line: *clearly defined whitish line or dots* in the cortex that form an upright or inverted Y; sometimes faint dotted circular opacities can be seen in its center.

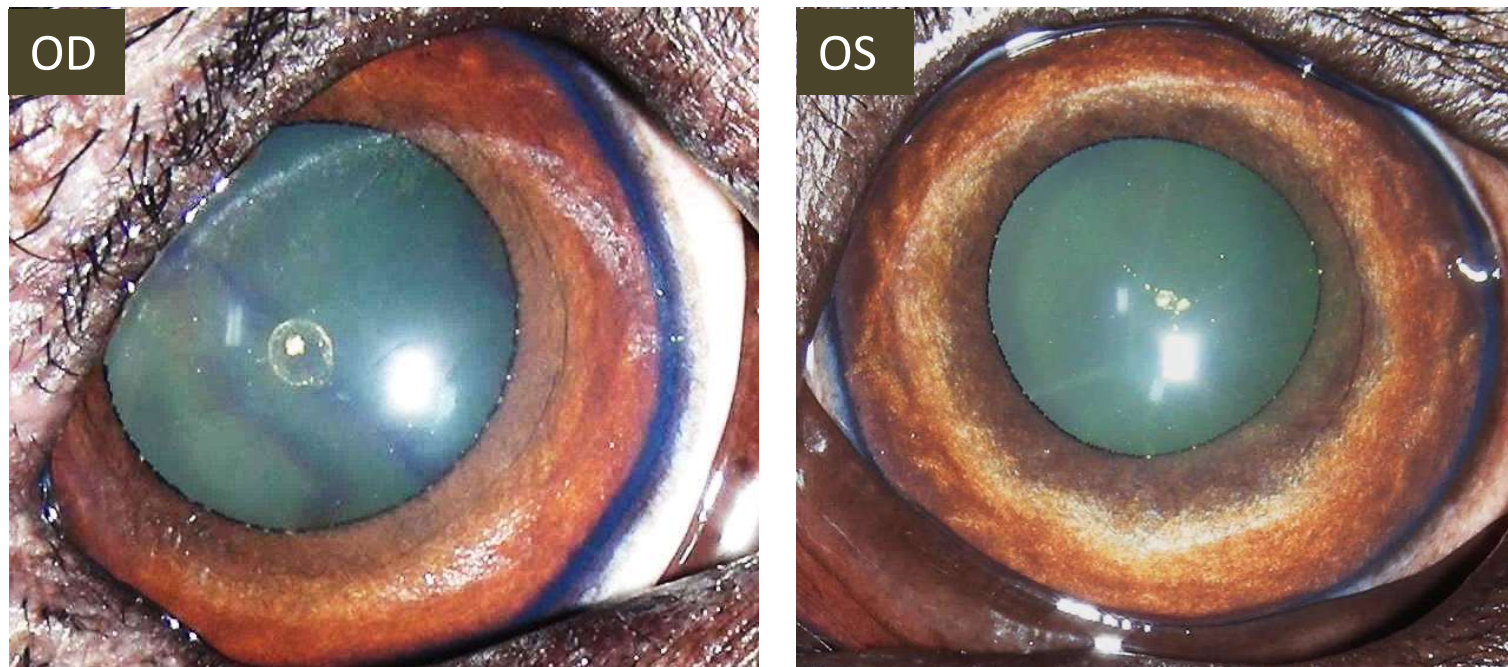


Irish Setter, m, 6y 10m: cataract - anterior suture line OU

Slides: S. Hertslet

Suture line: *clearly defined whitish line or dots* in the cortex that form an upright or inverted Y; sometimes faint dotted circular opacities can be seen in its center.

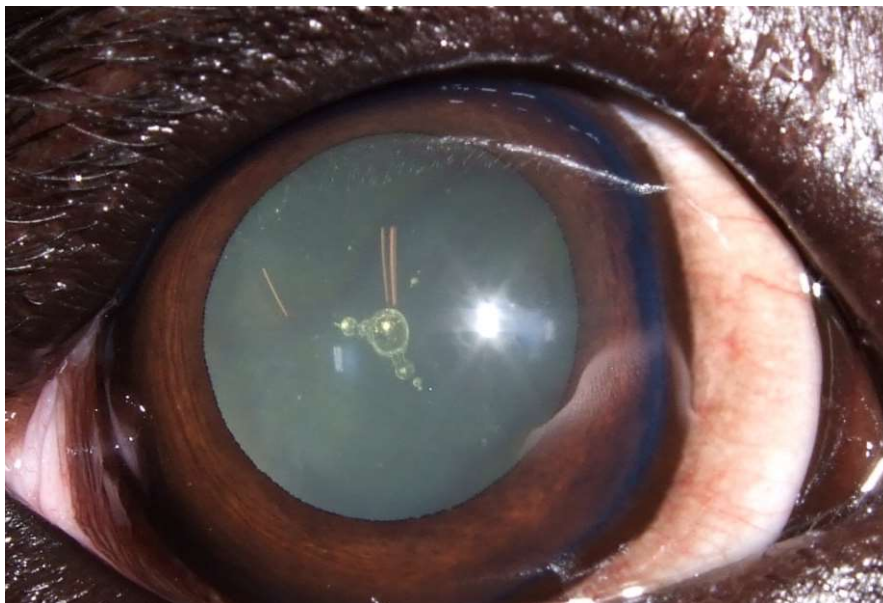
Comment: in general the anterior suture line opacities do not progress; in case progression is seen in following eye exams, tick at 15. cataract «cortical»



Rottweiler, m, 9m: cataract - anterior suture line OU

Suture line: *clearly defined whitish line or dots* in the cortex that form an upright or inverted Y; sometimes faint dotted circular opacities can be seen in its center.

Comment: in general the anterior suture line opacities do not progress; in case progression is seen in following eye exams, tick at 15. cataract (later onset) «cortical»



Rottweiler, m, 4y

Slide: S. Jalomäki



Czaja Airdale Terrier 5y 4m

Slide: S. Hertslet

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant.

**clinically less relevant
KP hereditary cataracts**

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☒ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

ICA

- ☐ moderate
- ☐ severe
- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

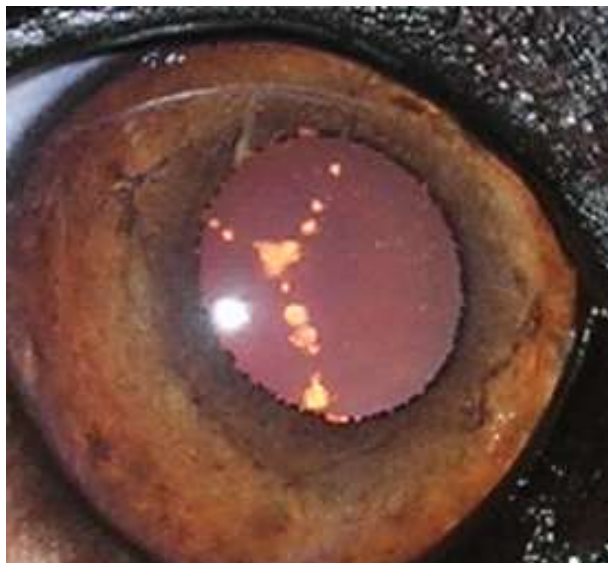
Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

If cataracts associated with the suture lines extend into the cortex: Tick at 15. cataract (later onset) «affected» and the box «cortical»



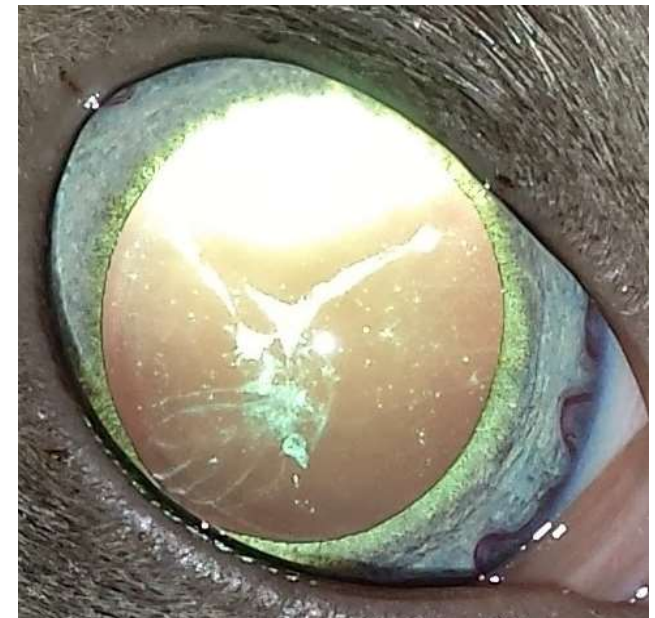
German Shepherd, 1y, f,
unilateral

Slide: Tierspital Zürich



Kartäuser (Chartreux) cat,
10y, f, unilateral

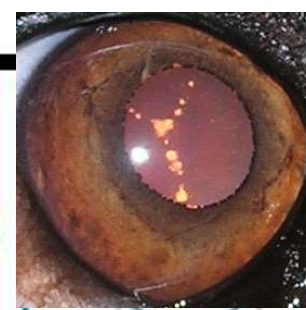
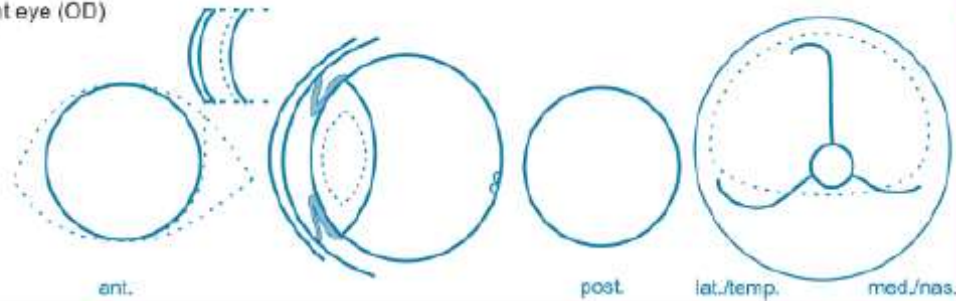
Slide: F. Matheis



Thai Siamese cat, f, 3y

Slide: M.Richter

Right eye (OD)



Descriptive
comments

15. Other
lens
opacity:

- ☐ punctata
☐ suture line tip
☐ suture line
☐ nuclear ring
☐ nuclear fiberglass/pulverulent

8. ICAA : PLA

- ☐ mild
☐ moderate
☐ severe
ICA ☐ narrow (moderate)
☐ closed (severe)

Eye disease no:

☐ Severe

Results for the known or presumed hereditary eye diseases

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> cornea <input type="checkbox"/> lens <input type="checkbox"/> lamina
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

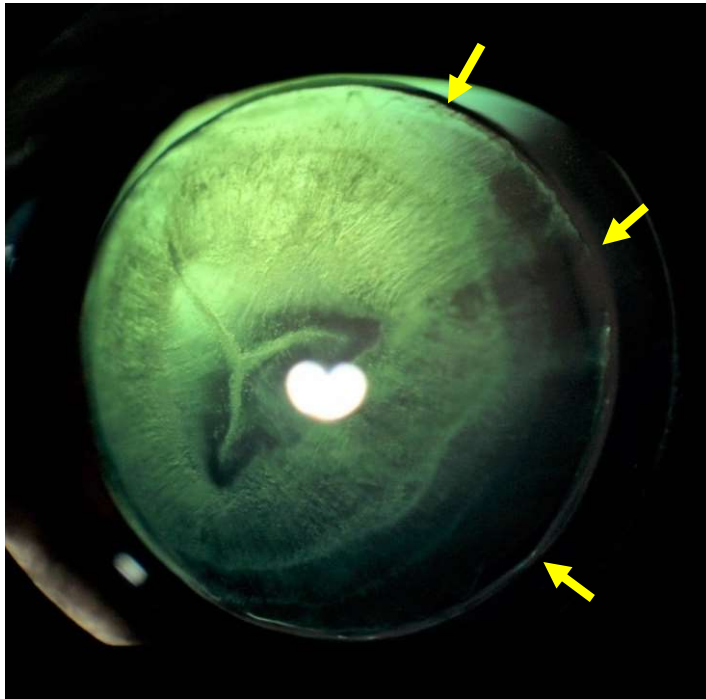
Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
 ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
 *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

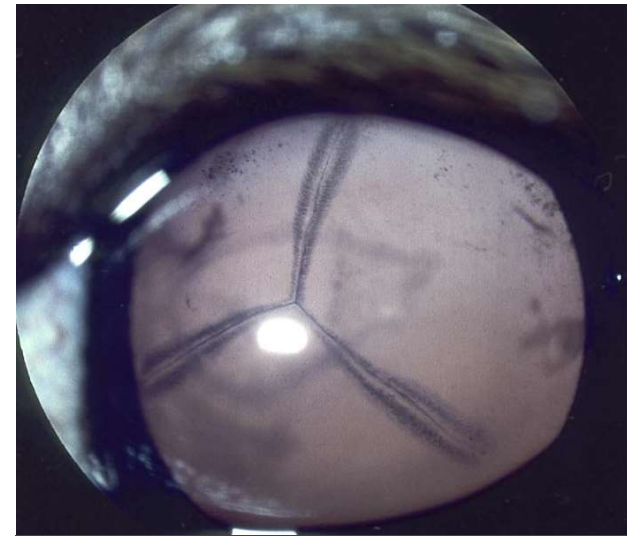
Examiner

If cataracts associated with the suture lines extend into the cortex: Tick at 15. cataract (later onset) «affected» and the box «cortical»



Siberian Husky, 7 mon: OD :
cataract, cortical, anterior
suture lines; microphakia

Slide: G. Chaudieu



breed and age unknown

Slide: F. Stades

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant.

Descriptive comments

15. Other lens opacity:

☐ punctata
☐ suture line tip
☐ suture line
☐ nuclear ring
☐ nuclear fiberglass/pulverulent

ICA

☐ severe
☐ narrow (moderate)
☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other Microphakia	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

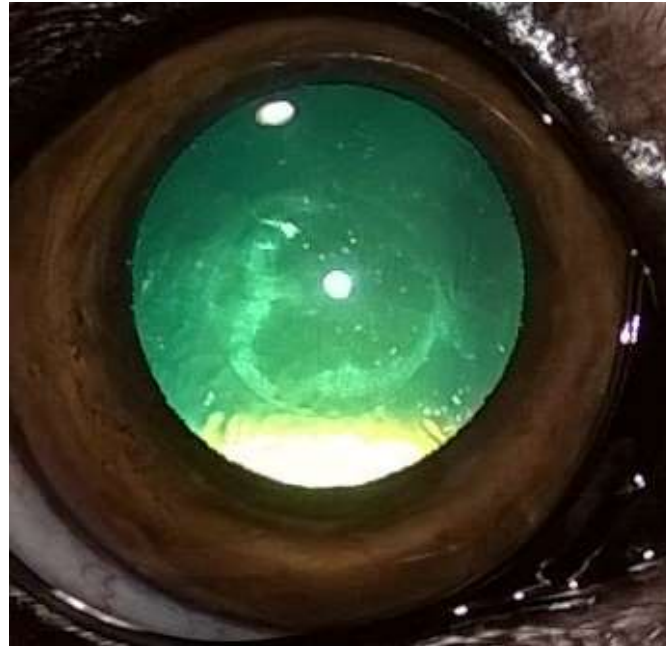
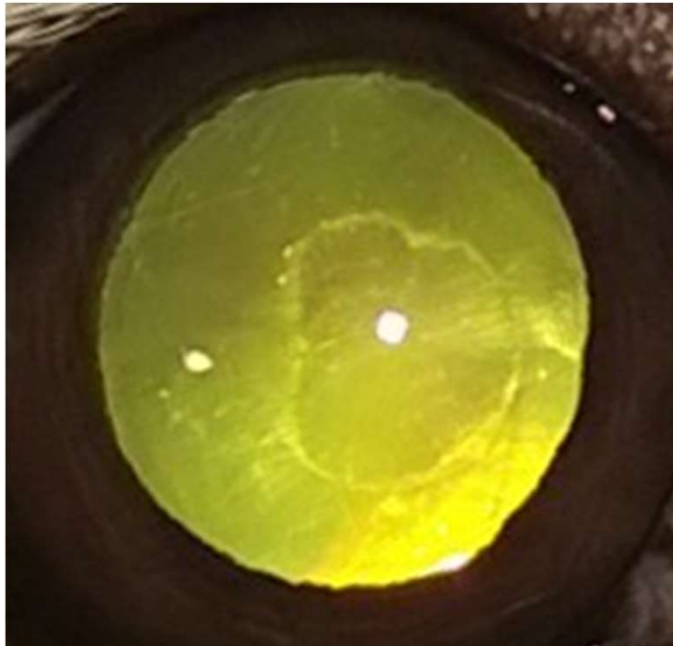
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- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Other lens opacities:

- Nuclear ring: delicate *semi-translucent irregular shaped* more or less circular structure in the nucleus



Slides: C. Bundgaard

Right eye (OD)

Left eye (OS)

**clinically less relevant
KP hereditary cataracts**

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☒ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe

ICA

- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total	14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other	16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Interpretation

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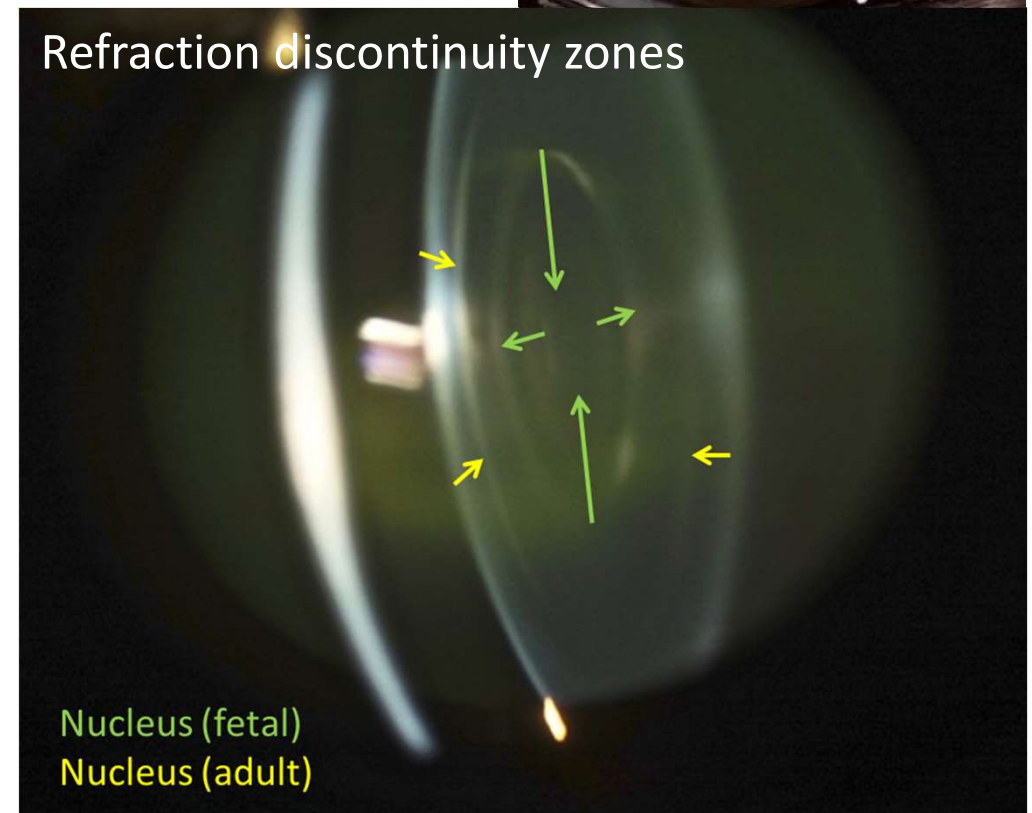
FOR FURTHER INFORMATION: P.T.O.

Examiner

Nuclear ring must not to be confused with:

Refraction discontinuity

zones: fine (light-grey) regular circular/bend lines due to different refractive indices of the fibers of the embryonic, fetal, juvenile and adult nucleus and cortex;
clinical significance: none



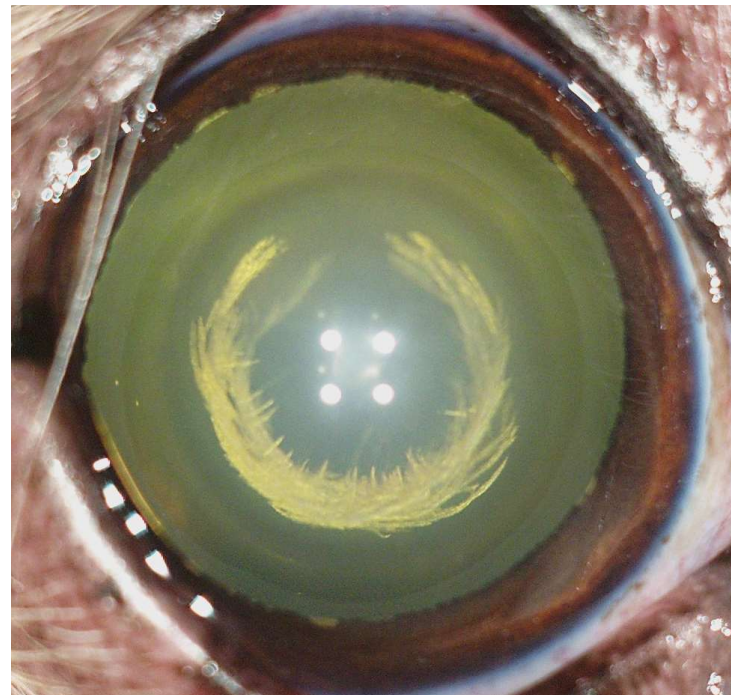
Slide: L. Karlstam

Nuclear ring must not to be confused with:
Ring-shaped **nuclear cataract** (*dense whitish*)



Golden Retriever, m, 1y2m

Slides: S.Hertslet



Bichon Frise, m, 7y, unilateral

Slide: HED session Antwerp 2019

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant. post. med./nas. lat./temp.

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe

ICA

- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	iris <input type="checkbox"/> cornea <input type="checkbox"/> lens <input type="checkbox"/> lamina <input type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	grade 1 <input type="checkbox"/> grade 2-6 <input type="checkbox"/>
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total <input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other <input type="checkbox"/>
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input checked="" type="checkbox"/>
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Interpretation

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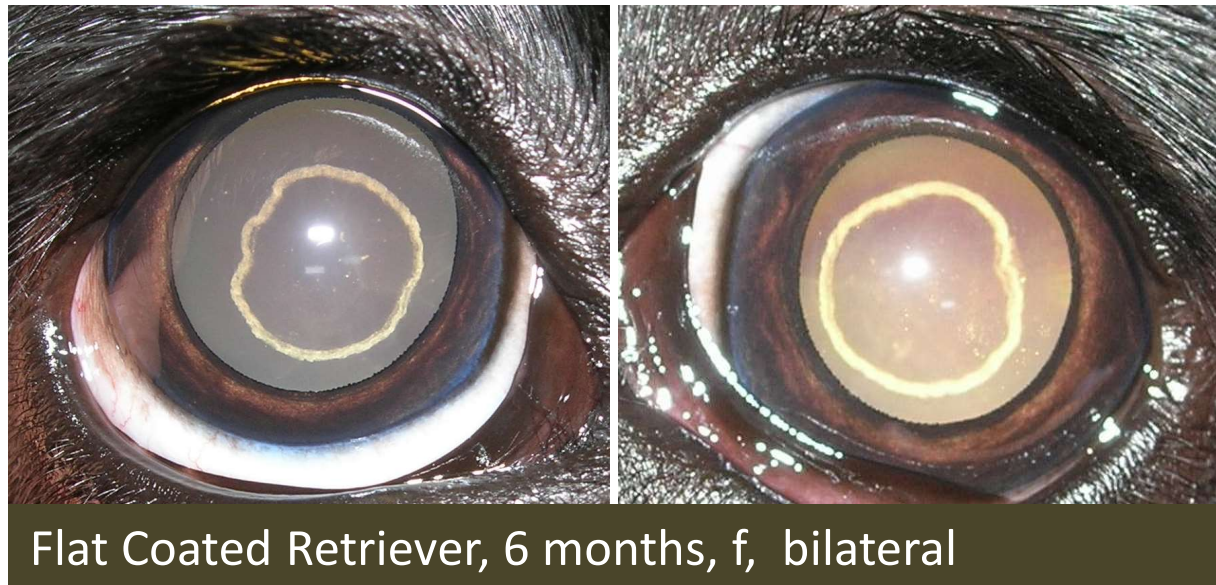
FOR FURTHER INFORMATION: P.T.O.

Examiner

Ring-shaped cataract: depending on its location within the lens:

If perinuclear (= cortical): **Tick at 15. cataract (later onset) – «cortical»**

If within the nucleus: **Tick at 15. cataract (later onset) – «nuclear»**



Slides: Tierspital Zürich

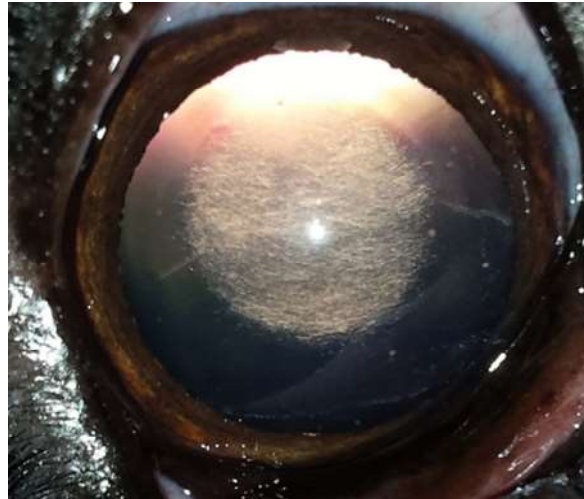
Other lens opacities:

- Nuclear fiberglass-like/pulverulent: *Fiberglass or crystal-like* opacities in the nucleus or *scattered fine pulverulent granules parallel to the suture lines* in the posterior nucleus and later with fibrillary opacities in the entire fetal nucleus, which may become dense and extending into the adult nucleus. These nuclear opacities are generally bilateral and do not impair vision significantly.



Golden Retriever

Slide: Keith Barnett



English Cocker Spaniel, 7y, bilateral

Slides: M.Richter



Right eye (OD)

Left eye (OS)

**clinically less relevant
KP hereditary cataracts**

Descriptive comments

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☒ nuclear fibreglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe

ICA

- ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months				
	UNAFFECTED	suspicious/ undetermined	AFFECTED			UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Interpretation

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FOR FURTHER INFORMATION: P.T.O.

Examiner

Vet advice

Cataract (hereditary, later onset): the breeding recommendation differentiates between clinically important and optional, low priority forms of cataracts

- Cataract „cortical“: vet advice = no breeding
- Cataract „post. pol“: vet advice = no breeding
- Cataract „nucleus“: vet advice = no breeding
- Other lens opacities: vet advice = **breeding optional, low priority**

Optional, low priority is valid for the following lens opacities, summarized in “other”: Punctate, Suture line tips, Suture line, Nuclear ring, Nuclear fiberglass-like/pulverulent

- **The following opacities on the lens capsule are *not* to be ticked as cataract:**
 - whitish spiderweb like opacities on the posterior lens capsule (uni- or bilateral)
 - **PPM, PHA, PHTVL grade1:** If the opacity on the lens is limited to the insertion/attachment of the relevant structure on the capsule, do ***not*** tick the box for cataract (congenital). Only, if a whitish opacity extends into the lens cortex adjacent to this, also tick the box for cataract (congenital). If there are other lens opacities not adjacent to the relevant structure, which might not be congenital, tick the relevant box at “15. Cataract (later onset)”.
 - **PHTVL grade 2-6:** in PHTVL/PHPV grade 2-6 the cataract and other lenticular abnormalities are part of the entity and are ***not*** to be ticked at “3. Cataract” and/or “7. Other”. If the posterior segment examination is not possible, tick at “7. Other” and “18. Other” the box “affected” and write or use (drop-down menu in the online form): “Posterior segment exam not possible”.

The following opacities on the lens capsule are *not* to be ticked as cataract:

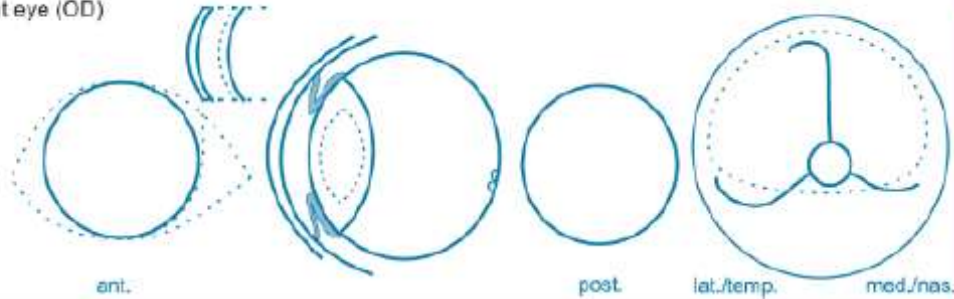
whitish spiderweb like opacities on the posterior lens capsule (uni- or bilateral)



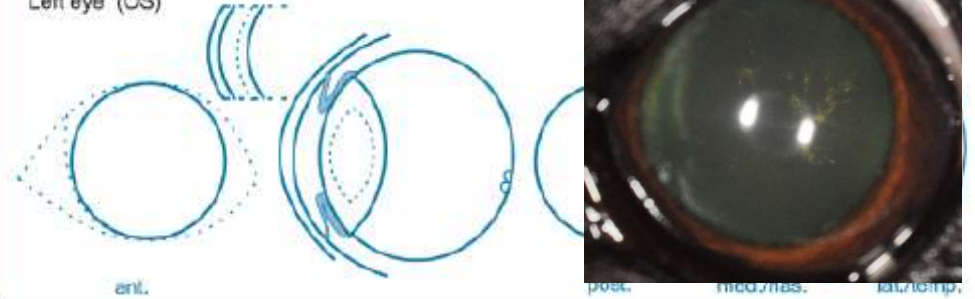
Flat Coated Retriever

Slide: A.Rampazzo

Right eye (OD)



Left eye (OS)



Descriptive comments

minor whitish irregularity on post. lens capsule

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe
- ICA ☐ narrow (moderate)
- ☐ closed (severe)

Eye disease no:

☐ Severe

Results for the known or presumed hereditary eye diseases

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> cornea <input type="checkbox"/> lens <input type="checkbox"/> lamina
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4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
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FOR FURTHER INFORMATION: P.T.O.

Examiner

The following opacities on the lens capsule are *not* to be ticked as cataract:

PPM, PHA, PHTVL grade1: If the opacity on the lens is limited to the insertion/attachment of the relevant structure on the capsule, do ***not*** tick the box for cataract (congenital). Only, if a whitish opacity extends into the lens cortex adjacent to this, also tick the box for cataract (congenital). If there are other lens opacities not adjacent to the relevant structure, which might not be congenital, tick the relevant box at “15. Cataract (later onset)”.



Miniature Schnauzer

Slides: L. Karlstam

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant. post. lat./temp. med./nas.

Descriptive comments

tiny pigment dots near/on post. lens capsule

15. Other lens opacity:

- ☐ punctata
- ☐ suture line tip
- ☐ suture line
- ☐ nuclear ring
- ☐ nuclear fiberglass/pulverulent

8. ICAA : PLA

- ☐ mild
- ☐ moderate
- ☐ severe

ICA

- ☐ narrow (moderate)
- ☐ closed (severe)

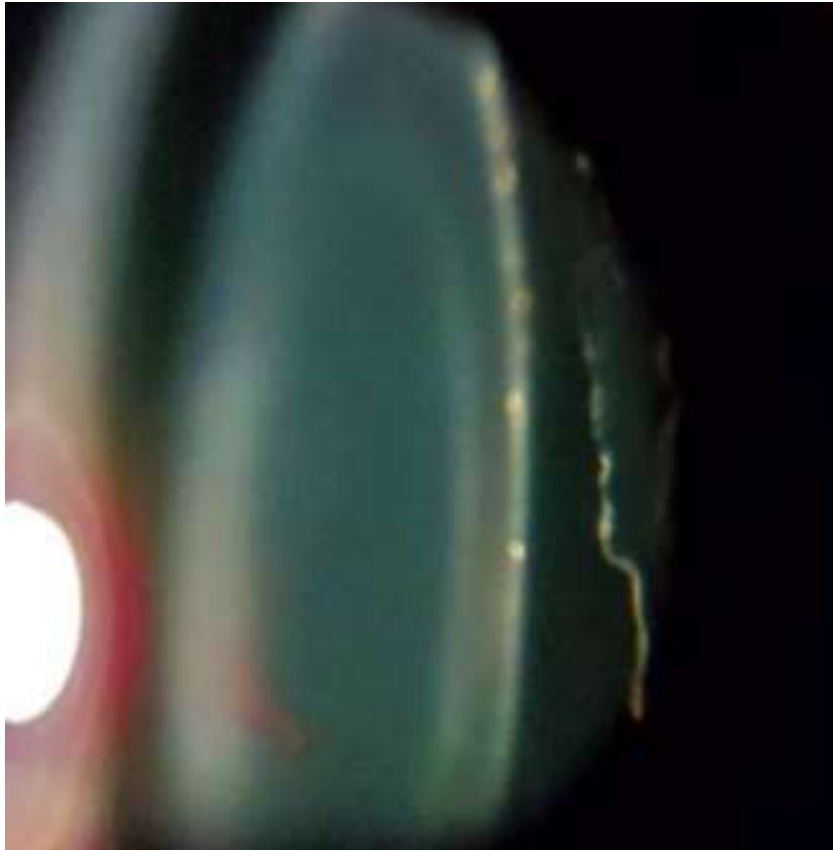
Eye disease no: ☐ Severe

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED		UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <div style="display: inline-block; vertical-align: middle;">iris lens</div>	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Do not confuse with:

PHTVL grade 1: thickened hyperplastic yellow-brown pigment dots on the posterior lens capsule



Slides: L.Karlstam

Right eye (OD)

Left eye (OS)

Minor, yellow-brown hyperplastic dots of fibrous tissue on the posterior lens capsule are ticked at "2. PHTVL/PHPV" "affected", and the specifying box "grade 1".

If they are unilateral, and of minimal degree, "undetermined" is to be ticked.


☐ nuclear ring

☐ nuclear fibreglass/pulverulent
ICA ☐ narrow (moderate)
☐ closed (severe)

Eye disease no:

☐ Severe

Results for the known or presumed hereditary eye diseases

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> cornea <input type="checkbox"/> lens <input type="checkbox"/> lamina
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

The following opacities on the lens capsule are *not* to be ticked as cataract:

PPM, PHA, PHTVL grade1: If the opacity on the lens is limited to the insertion/attachment of the relevant structure on the capsule, do ***not*** tick the box for cataract (congenital). Only, if a whitish opacity extends into the lens cortex adjacent to this, also tick the box for cataract (congenital). If there are other lens opacities not adjacent to the relevant structure, which might not be congenital, tick the relevant box at “15. Cataract (later onset)”.



Slides: M.Richter

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant.

Descriptive comments

tiny pigment dots central ant. lens capsule

15. Other lens opacity:

☐ punctata
 ☐ suture line tip
 ☐ suture line
 ☐ nuclear ring
 ☐ nuclear fiberglass/pulverulent

ICA

☐ moderate
 ☐ severe
 ☐ narrow (moderate)
 ☐ closed (severe)

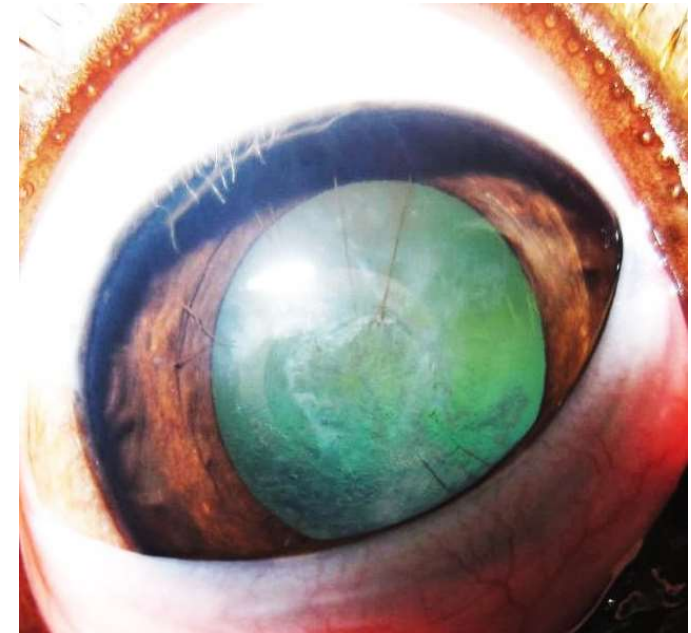
Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months						
	UNAFFECTED	suspicious/ undetermined	AFFECTED				UNAFFECTED	suspicious/ undetermined	AFFECTED		
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

The following opacities on the lens capsule are *not* to be ticked as cataract:

PPM, PHA, PHTVL grade1: If the opacity on the lens is limited to the insertion/attachment of the relevant structure on the capsule, do ***not*** tick the box for cataract (congenital). Only, if a whitish opacity extends into the lens cortex adjacent to this, also tick the box for cataract (congenital). If there are other lens opacities not adjacent to the relevant structure, which might not be congenital, tick the relevant box at “15. Cataract (later onset)”.

Microphthalmos may or may not be associated with cataract: if cataract is present: tick the relevant box



Petit Basset Griffon Vendeen, 8 month, f: microphthalmus, PPM iris-lens, cortical cataract OD (unilateral)

Slides: M.Richter

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant.

Descriptive comments

15. Other lens opacity:

☐ punctata
☐ suture line
☐ suture line
☐ nuclear ring
☐ nuclear fiberglass/pulverulent

☐ closed (severe)

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases

Results valid for 12 months

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> iris <input type="checkbox"/> cornea <input checked="" type="checkbox"/> lens <input type="checkbox"/> lamina
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other
7. Other: Microphthalmos	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

	UNAFFECTED	suspicious/ undetermined	AFFECTED	
11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (later onset)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear
16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Interpretation

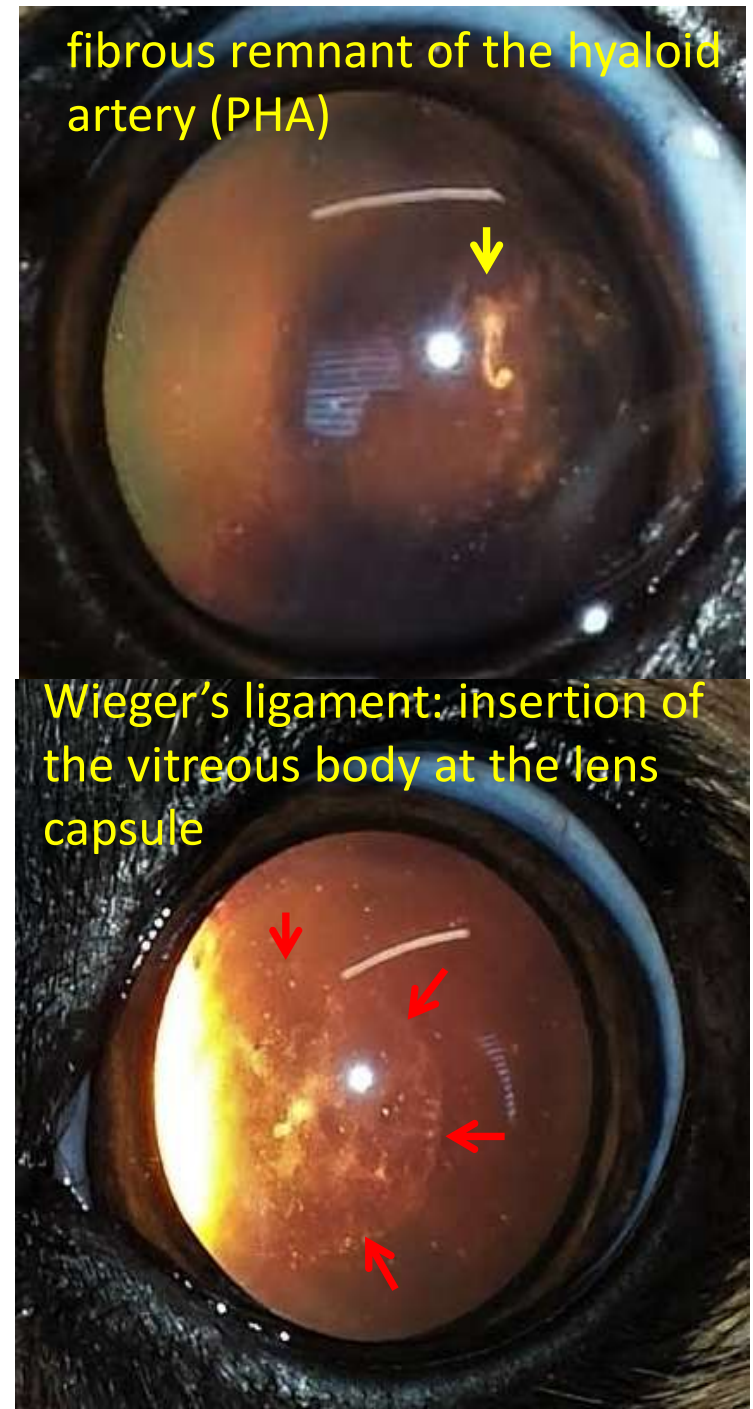
- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

The following opacities on the lens capsule are *not* to be ticked as cataract:

PPM, PHA, PHTVL grade1: If the opacity on the lens is limited to the insertion/attachment of the relevant structure on the capsule, do **not** tick the box for cataract (congenital). Only, if a whitish opacity extends into the lens cortex adjacent to this, also tick the box for cataract (congenital). If there are other lens opacities not adjacent to the relevant structure, which might not be congenital, tick the relevant box at “15. Cataract (later onset)”.



Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant. lat./temp.

Descriptive comments

15. Other lens opacity:

☐ punctata
☐ suture line tip
☐ suture line
☐ nuclear ring
☐ nuclear fiberglass/pulverulent

☐ severe
☐ narrow (moderate)
☐ closed (severe)

ICA

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months						
	UNAFFECTED	suspicious/ undetermined	AFFECTED				UNAFFECTED	suspicious/ undetermined	AFFECTED		
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Persistent hyaloid artery

Interpretation

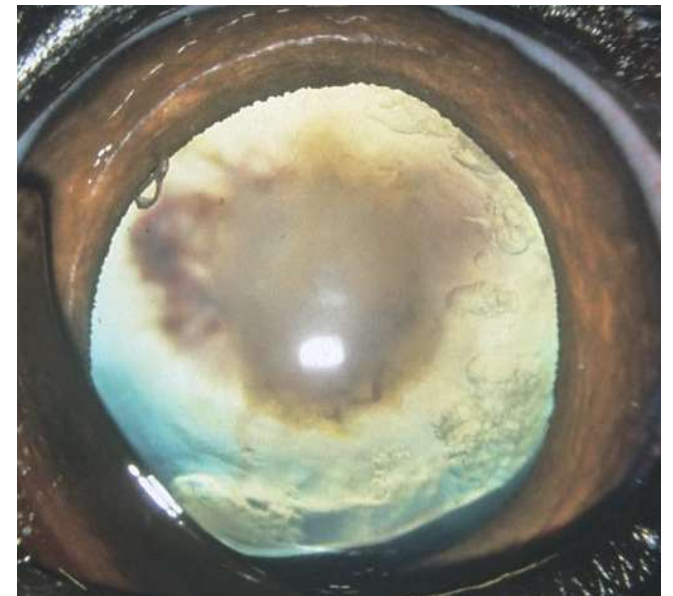
- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner

The following opacities on the lens capsule are *not* to be ticked as cataract:

PHTVL grade 2-6: in PHTVL/PHPV grade 2-6 the cataract and other lenticular abnormalities are part of the entity and are *not* to be ticked at “3. Cataract” and/or “7. Other”. If the posterior segment examination is not possible, tick at “7. Other” and “18. Other” the box “affected” and write or use (drop-down menu in the online form): “Posterior segment exam not possible”.



Slides: F. Stades

Right eye (OD)

ant. post. lat./temp. med./nas.

Left eye (OS)

ant. post. lat./temp. med./nas.

Descriptive comments

15. Other lens opacity:

☐ punctata
☐ suture line tip
☐ suture line
☐ nuclear ring
☐ nuclear fiberglass/pulverulent

☐ moderate
☐ severe
☐ narrow (moderate)
☐ closed (severe)

ICA

Eye disease no: ☐ Severe

Results for the known or presumed hereditary eye diseases					Results valid for 12 months						
	UNAFFECTED	suspicious/ undetermined	AFFECTED				UNAFFECTED	suspicious/ undetermined	AFFECTED		
1. Persistent Pupillary Membrane (PPM)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	11. Entropion / Trichiasis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Persistent Hyperpl. Tunica Vasculosa Lentis/ Primary Vitreous (PHTVL/PHPV)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> grade 1 <input checked="" type="checkbox"/> grade 2-6		12. Ectropion / Macrolepharon	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. Cataract (congenital)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			13. Distichiasis / Ectopic cilia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Retinal Dysplasia (RD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total		14. Corneal dystrophy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Hypoplastic-/Micro-papilla	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			15. Cataract (later onset)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear	
6. Collie Eye Anomaly (CEA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other		16. Lens luxation (primary)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			17. Retinal degeneration (PRA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
						18. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Interpretation

- * "Unaffected" signifies that there is no clinical evidence of the presumed inherited eye disease(s) specified, whereas "affected" signifies that there is such evidence.
- ** "Undetermined" The animal displays clinical features that could possibly fit the presumed inherited eye disease(s) mentioned, but the changes are inconclusive.
- *** "Suspicious" The animal displays minor, but specific signs of the presumed inherited eye disease(s) mentioned. Further development will confirm the diagnosis.

FOR FURTHER INFORMATION: P.T.O.

Examiner