

# HED SESSION È 2021

1



## **PK-HED cataracts: definitions, guidelines, vet advice**

Marianne Richter, Dipl. ECVO  
HED-committee chair



## I. PK-HED: cataract – news regarding definitions, guidelines, vet advice

**the aims of the revision of the cataract issue are:**

“ to differentiate and separate clinically relevant from clinically less important known/presumed hereditary cataracts.

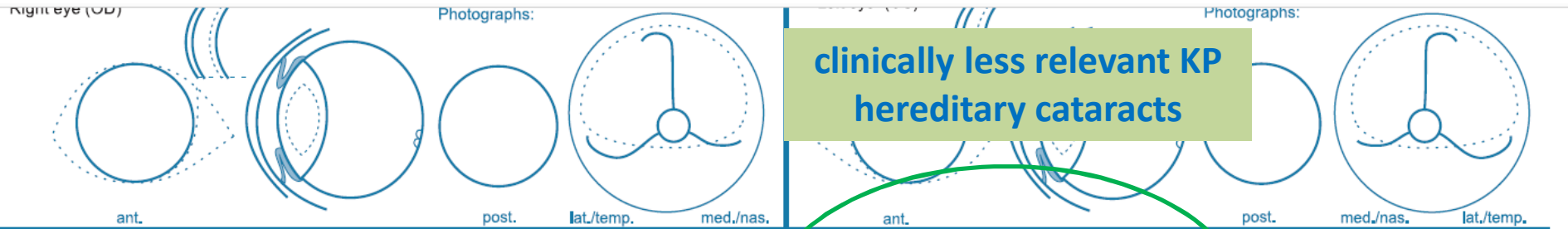
The latter are now summarized in the ECVO certificate under “cataract - other”

- . this will be easier for breeders to read the certificate; breeding clubs will be informed by the HED committee and chief panelists.

“ to create a template for reference: with slides as a reference and clear definitions of types of cataracts for panelists and for residents.



# new printed ECVO Certificate



Descriptive comments: .....

Eye disease no. ....  severe

15. Cataract other:  punctata  
 suture line tip  
 suture line  
 nuclear ring  
 nuclear fiberglass/pulverulent
18. ICAA: PLA  mild  
 moderate  
 severe
- ICA (width)  narrow (moderate)  
 closed (severe)

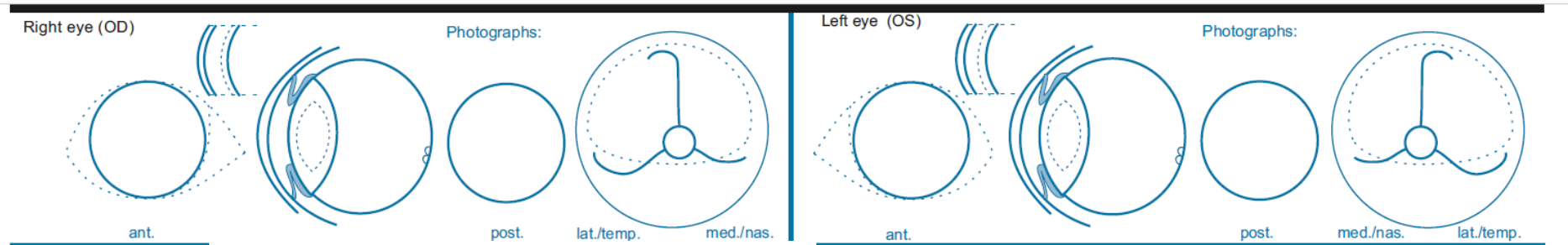
Results for the known or presumed hereditary eye diseases (KP-HED):			
	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens
2. Persistent Hyperpl. Tunica Vasculosa 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	
8. IridoCorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	

Results valid for 12 months			
	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macrolidopharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**vet advice: "breeding optional – low priority"**

Inte...  
 \* ...  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner



Descriptive comments: **15. other: punctata/suture line tips/suture line/nuclear ring/nuclear fiberglass-like/ pulverulent**

ICAA: PLA  mild  moderate  severe  
 ICA width  narrow (moderate)  closed (severe)

Eye disease no. .

Results for the known or presumed hereditary diseases (KP-HED):				Results valid for 12 months			
	UNAFFECTED *	UNDETERMINED **	AFFECTED *		UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<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 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 type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6	12. Ectropion/Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Distichiasis /Ectopic cilia	<input 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	14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> ant. cortex <input type="checkbox"/> punctate <input type="checkbox"/> nucleus <input type="checkbox"/> other
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid. hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:	16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. IridoCorneal Abnormality. (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe	18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Interpretation**  
 \* "Unaffected" si  
 \*\* The animal dis  
 \*\*\* The animal dis

**Note: 15. Cataract (non-congenital): new judgement is approved by the Executive Committee and has to be used from today**

s such evidence.

FOR FUTHER INFORMATION: P.T.O. | Examiner





## I. PK-HED: cataract – news regarding definitions

**Cataract:** is an opacity (generally whitish) in different shapes and sizes in the lens nucleus, and/or cortex and/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.

## I. PK-HED: cataract – news regarding definitions

### Classification according to aetiology:

- “ **Primary cataracts**: all bilateral or unilateral cataracts and especially cortical cataracts are KP-HEDs (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.



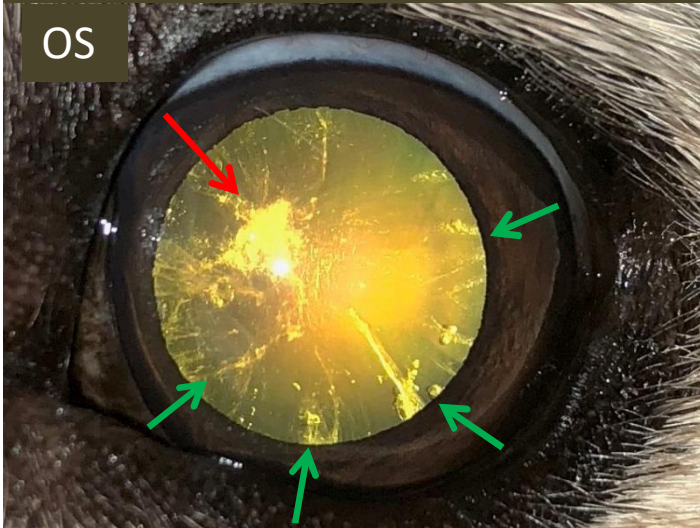
## primary versus secondary cataracts

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).

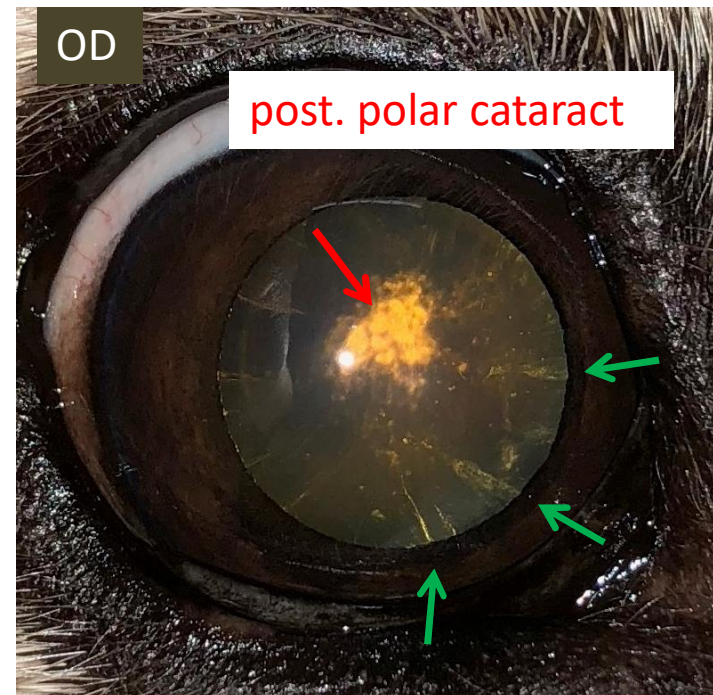
Slides: F. Matheis

Marianne Richter, Dipl ECVO

Golden Retriever, 8y, m; PRA



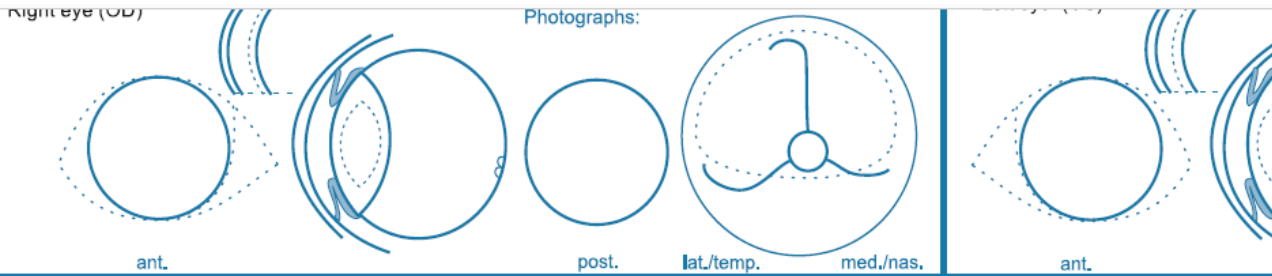
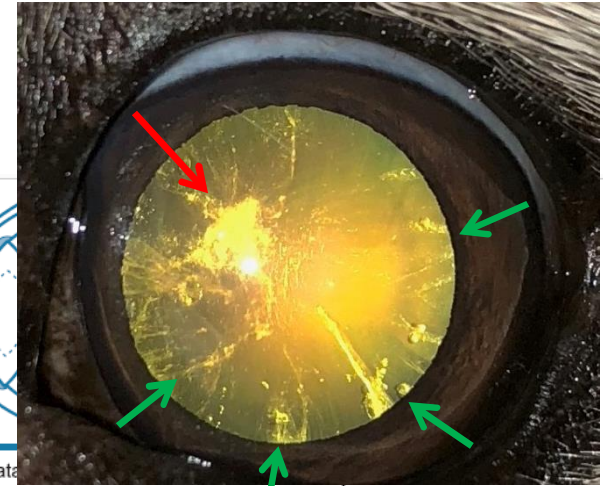
cortical cataract secondary to PRA



post. polar cataract



# new printed ECVO Certificate



Descriptive comments:

**OU: cortical cataracts  
secondary to PRA**

Eye disease no.  severe

15. Cataract other:
- punctate
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent
  - moderate
  - severe
  - ICA (width)  narrow (moderate)
  - closed (severe)

### Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

iris  cornea  
 lens  lamina  
 grade 1  
 grade 2-6  
 (multi)focal  
 geographical  
 total  
 choroid, hypoplasia  
 coloboma  
 other:  
 mild  
 moderate  
 severe

### Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Interpretation

- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
- \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.
- \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

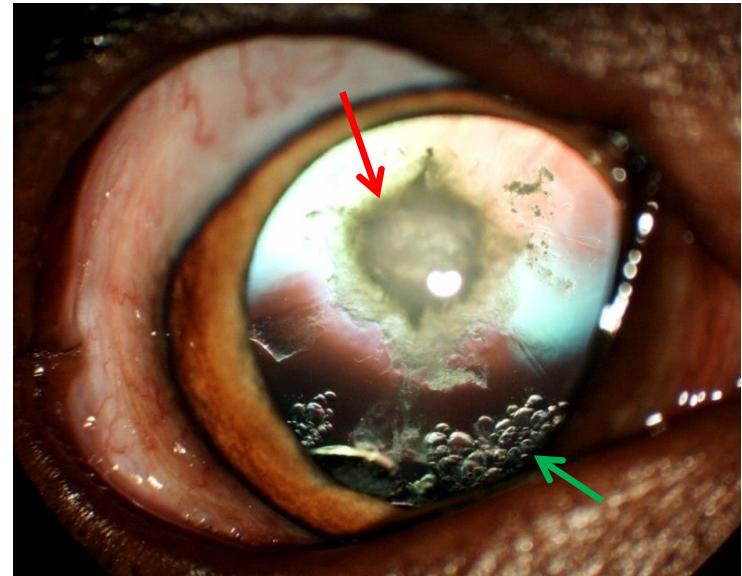
Examiner



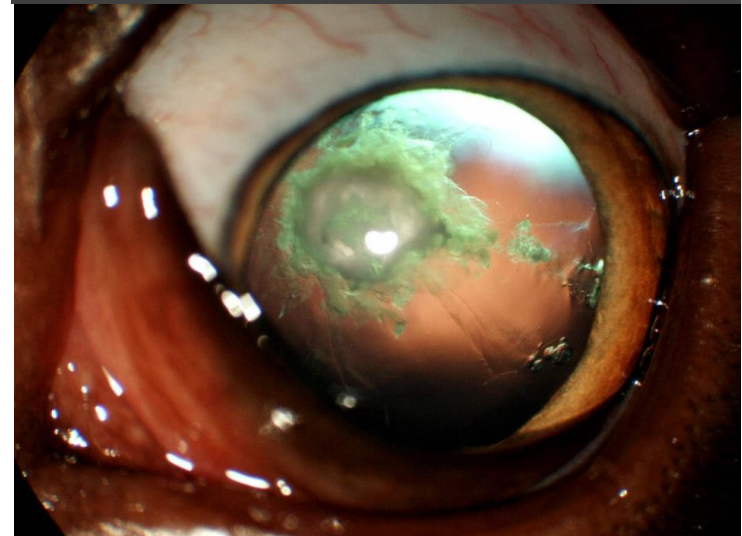
## Cataract (congenital)

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

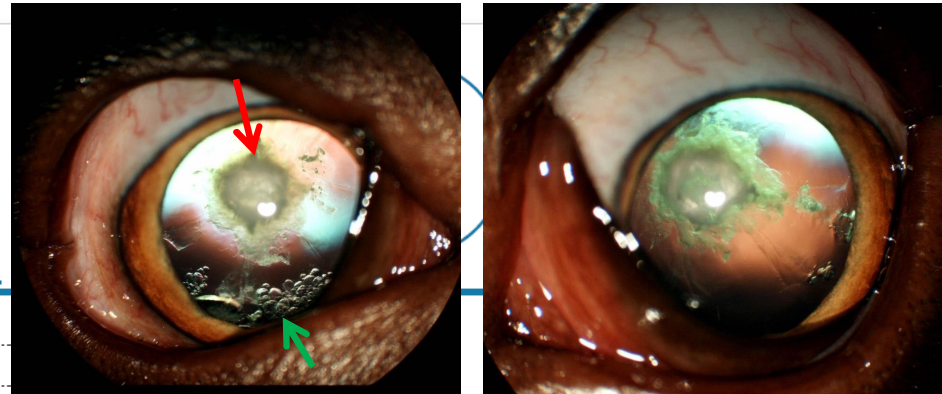
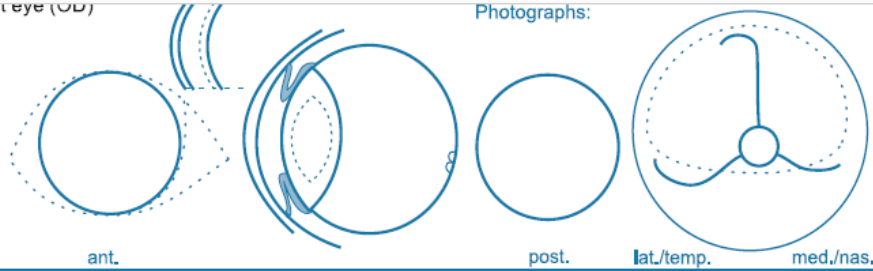




# new printed ECVO Certificate

Right eye (OD)

Photographs:



Descriptive comments:

.....  
 .....  
 .....

Eye disease no. ....  severe

nuclear ring  
 nuclear fibreglass/pulverulent  
 ICA  narrow (moderate) (width)  
 closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<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"/>
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"/>
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"/>
7. Other: <b>Microphthalmos</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	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 (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>
18. Other: .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner

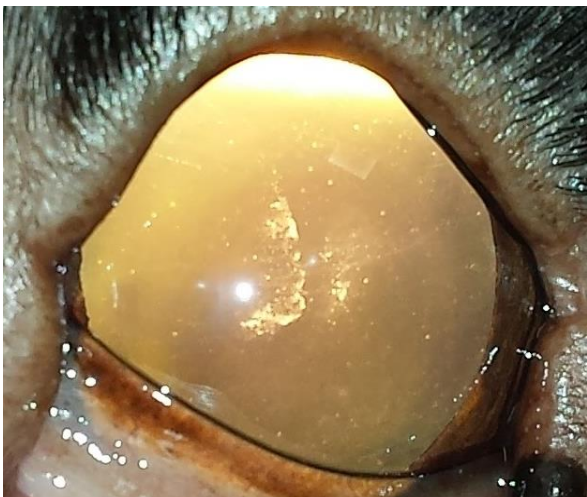
## I. PK-HED: cataract – news regarding guidelines

### 15. Cataract (non-congenital):

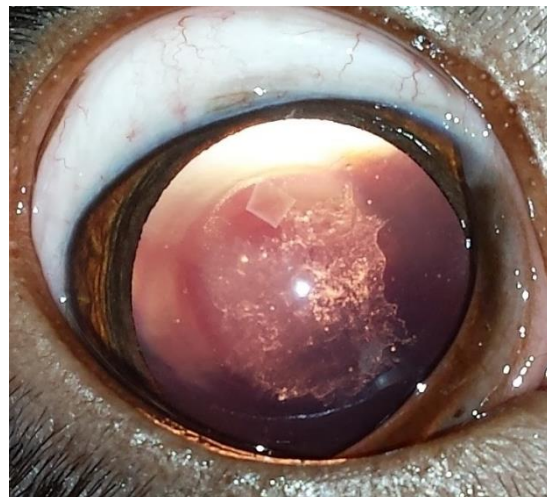
#### Classification according to location:

- “ **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)
- “ **Other lens opacities (cataracts)**: punctate, suture line tips, suture lines, nuclear ring, nuclear fiberglass-like/pulverulent

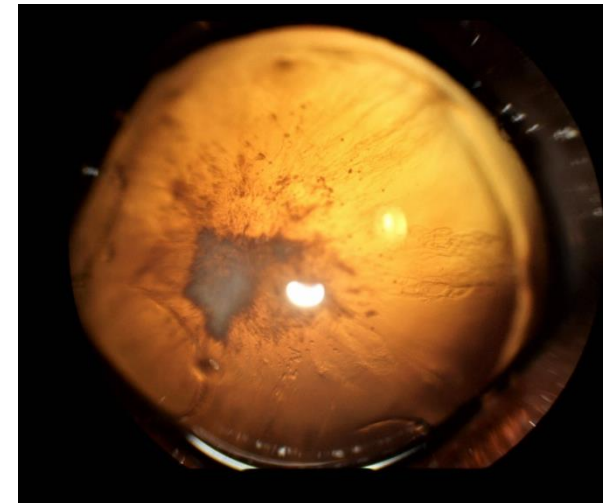
“ **Cortical cataracts:** any opacity in the anterior and/or posterior cortex unilateral or bilateral (except the posterior polar cataract and those listed under “other”)



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



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



Miniature Poodle, 4y5m, f,  
**unilateral**

Slides: M.Richter

Slide: G. Chaudieu

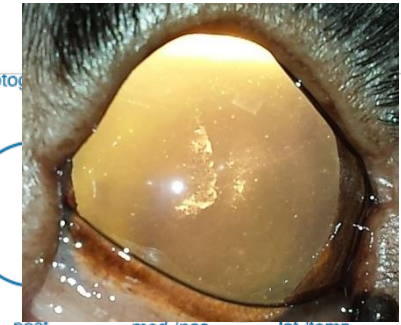
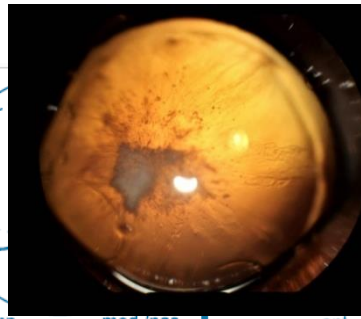
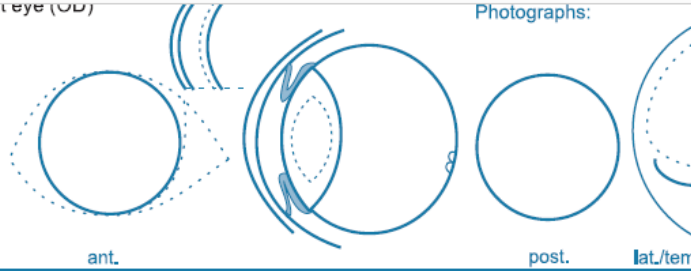




# new printed ECVO Certificate

Right eye (OD)

Photographs:



Descriptive comments:

.....  
 .....  
 .....

Eye disease no. ....  severe

15. Cataract other:

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

8. ICAA: PLA

- mild
- moderate
- severe

ICA (width)  narrow (moderate)  closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<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 type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner

## Further instructions for filling out the ECVO form

### Total cataract

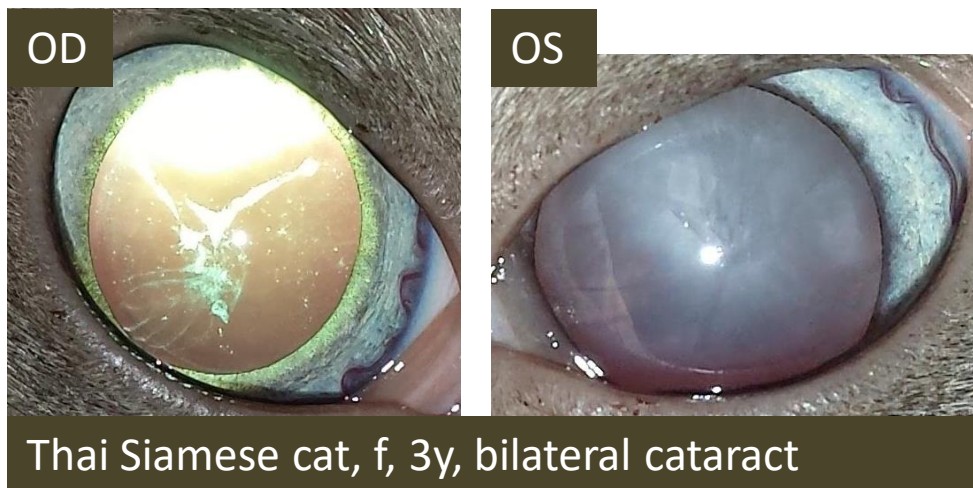
OD: cortical cataract

OS: mature/total cataract

Note: in a **total cataract**

tick at 15. Cataract (non-congenital) - «cortical» + «nuclear»

tick at 18. Other: **Posterior segment exam not possible**



Slides: M.Richter



# new printed ECVO Certificate

Right eye (OD) Photographs:

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

Thai Siamese cat, f, 3y, bilateral

Descriptive comments: .....

Eye disease no. ....  severe

15. Cataract other:  punctata  suture line tip  suture line  nuclear ring  nuclear fiberglass/pulverulent
8. ICAA: PLA  mild  moderate  severe
- ICA (width)  narrow (moderate)  closed (severe)

### Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<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"/>
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"/>
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"/>
7. Other: .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. IridoCorneal Angle Abnormality. (ICAA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	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 (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>
18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

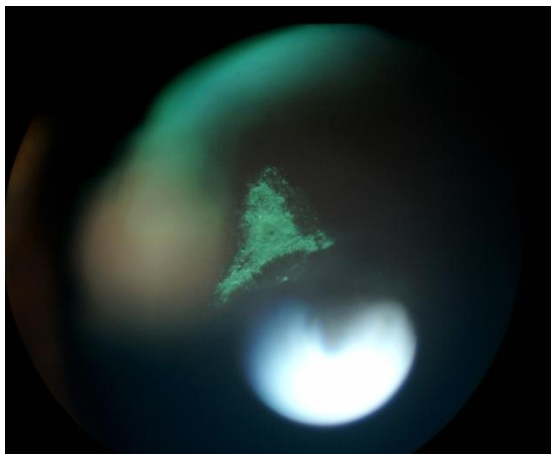
**Post. segment exam not possible**

### Interpretation

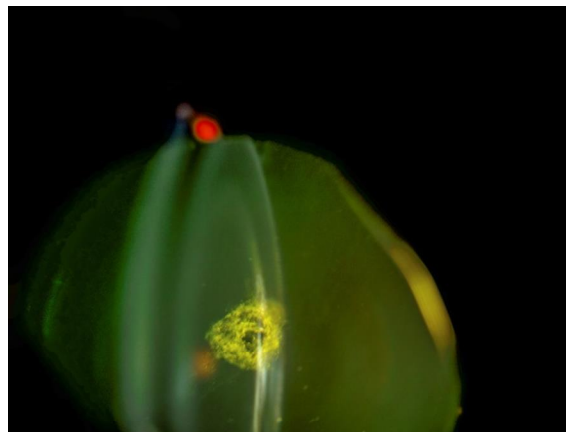
\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner

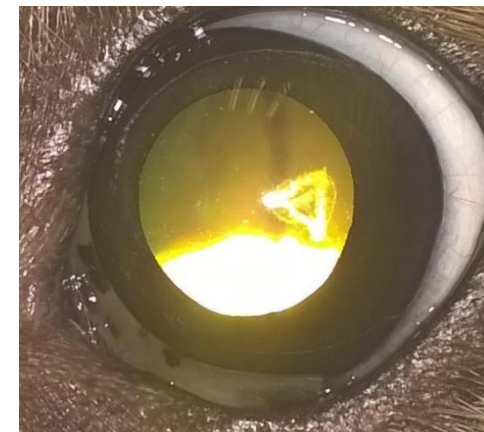
” **Posterior polar cataract:** is a subtype of the cortical cataract, it presents as a distinctive triangular (sometimes discoid) plaque situated in the central posterior cortex, in general adjacent to the posterior capsule. Sometimes there is a smaller satellite rosette lesion adjacent to the central 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)



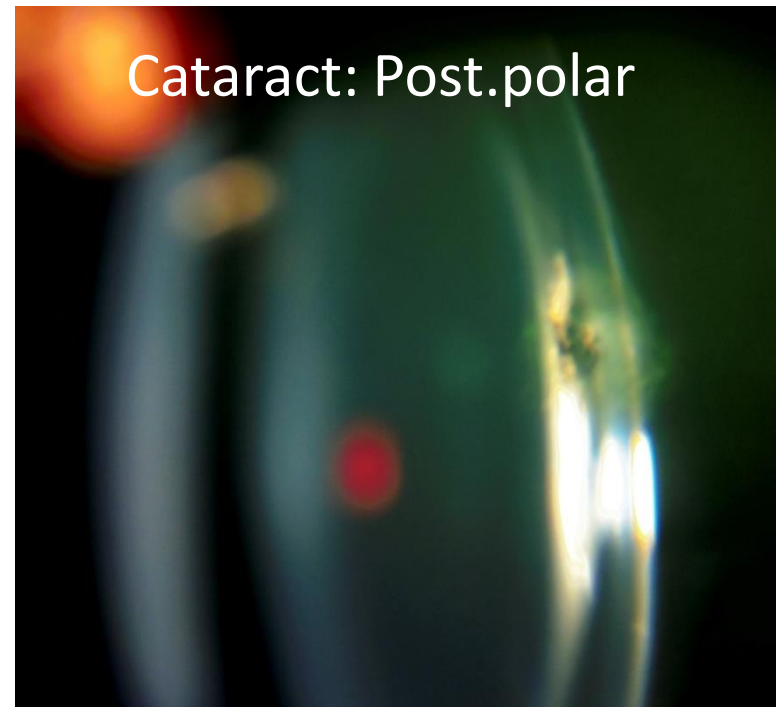
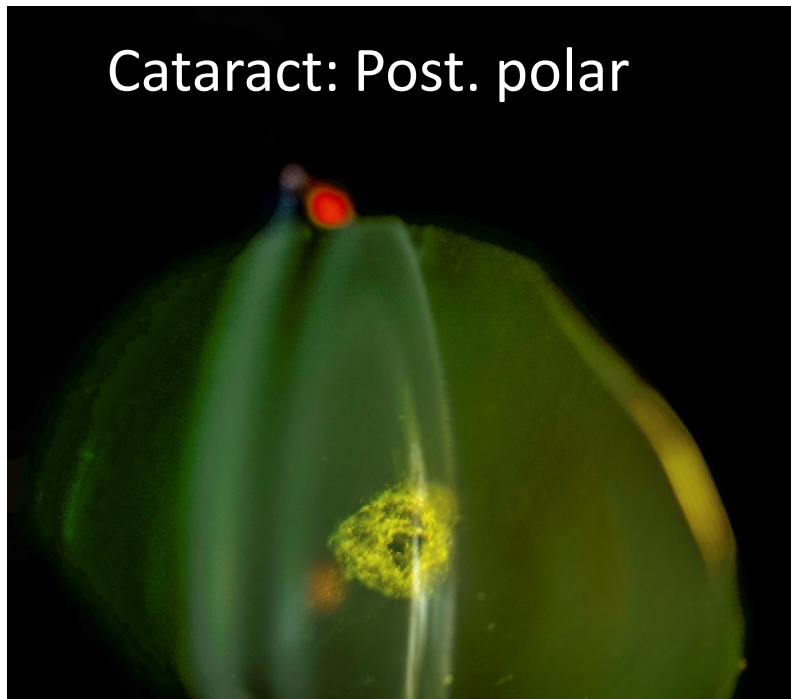
Labrador Retriever, 5y  
(L. Karlstam)



Golden Retriever, 6y  
(L. Karlstam)



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



Slides: L. Karlstam

## Further instructions for filling out the ECVO form

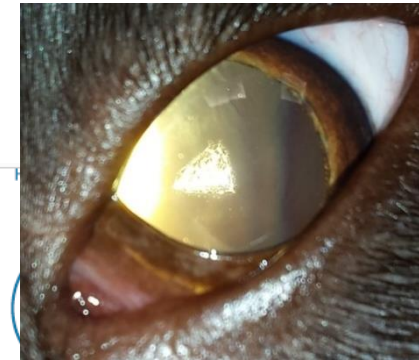
If there is a distinct (well defined) post. pol. cataract, without signs of spreading into the remaining cortex, tick at “15. Cataract (non-congenital)” the box “affected” and the specifying box "post. pol";



Slides: M.Richter

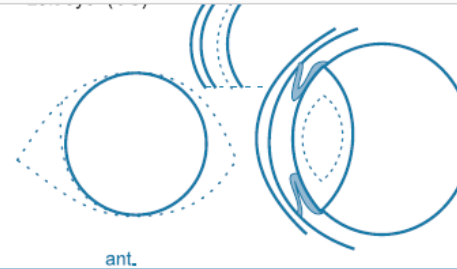
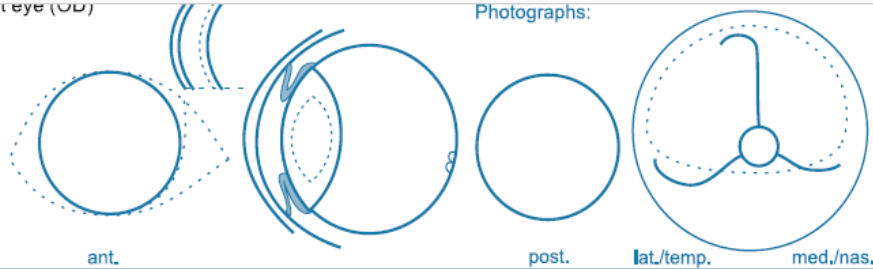


# new printed ECVO Certificate



Right eye (OD)

Photographs:



Descriptive comments:

.....  
 .....  
 .....

Eye disease no. ....  severe

15. Cataract other:

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

8. ICAA: PLA

- mild
- moderate
- severe

ICA (width)

- narrow (moderate)
- closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macropblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

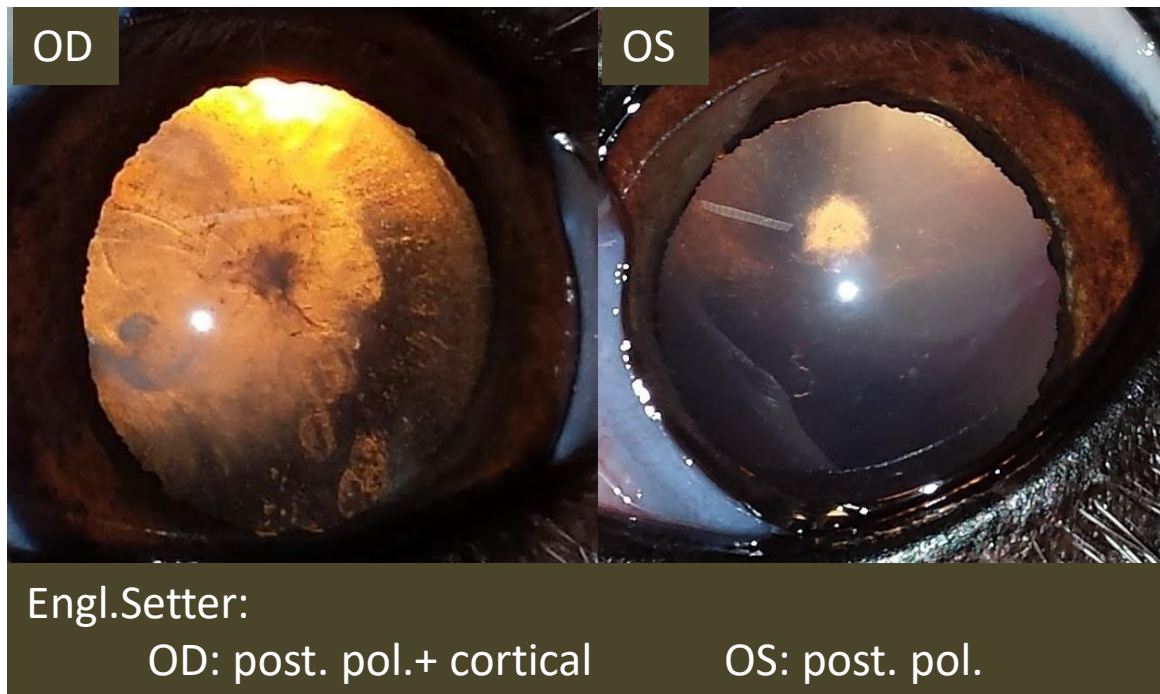
FOR FUTURE INFORMATION: P.T.O.

Examiner

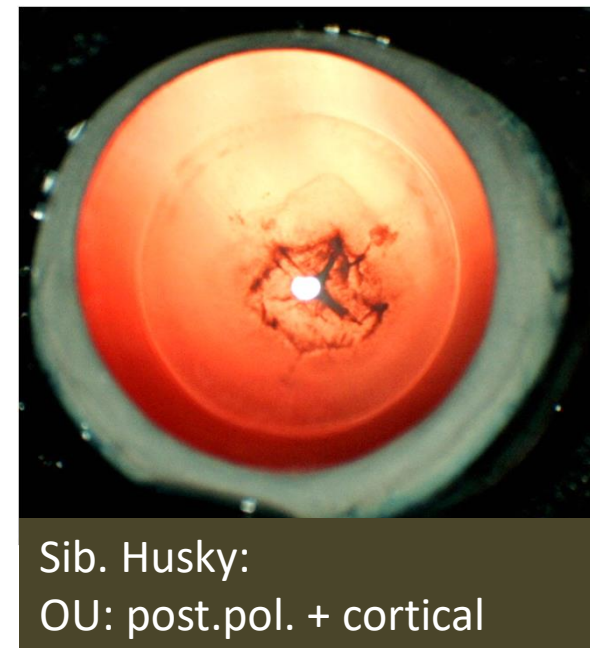


## Further instructions for filling out the ECVO form

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



Slides: M.Richter

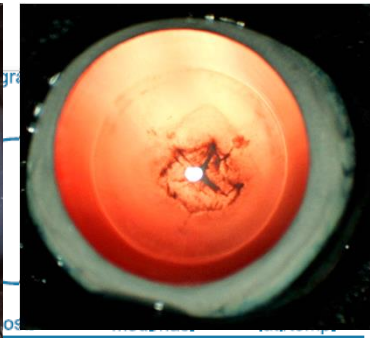
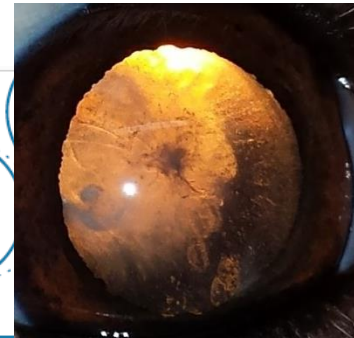
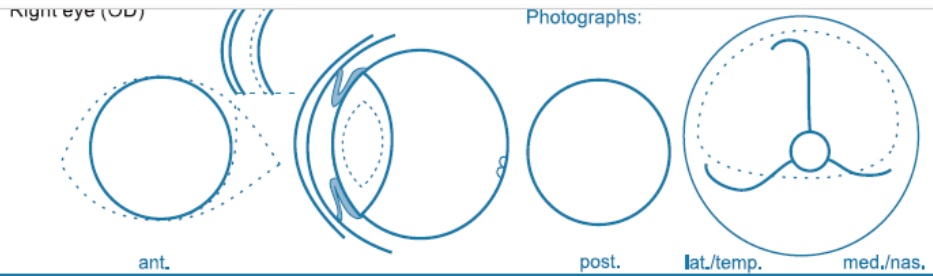


Slide: HEDsession Antwerp 2019





# new printed ECVO Certificate



Descriptive comments: .....

Eye disease no. ....  severe

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent

8. ICAA: PLA
- mild
  - moderate
  - severe
- ICA (width)
- narrow (moderate)
  - closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

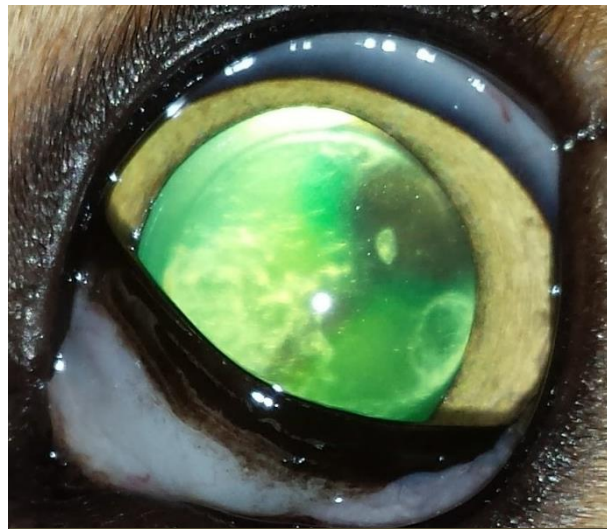
\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTURE INFORMATION: P.T.O. | Examiner

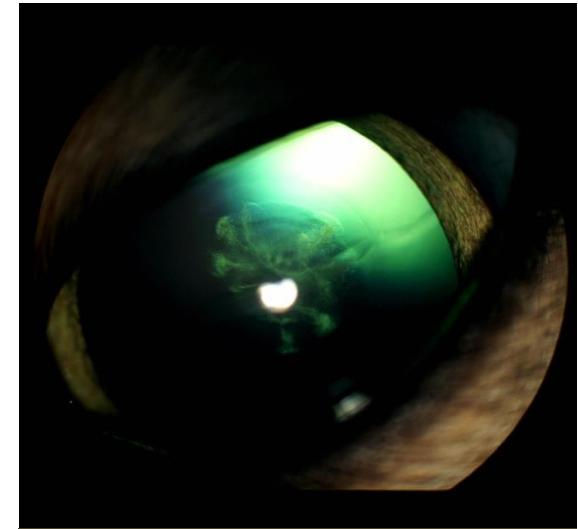
” **Nuclear cataracts:** any *whitish opacity* in the nucleus (embryonal, fetal, juvenile, adult); (*exceptions: fiberglass like and pulverulent cataracts – see other lens opacities*)



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



Bengal cat, 2y, nuclear cataract OU



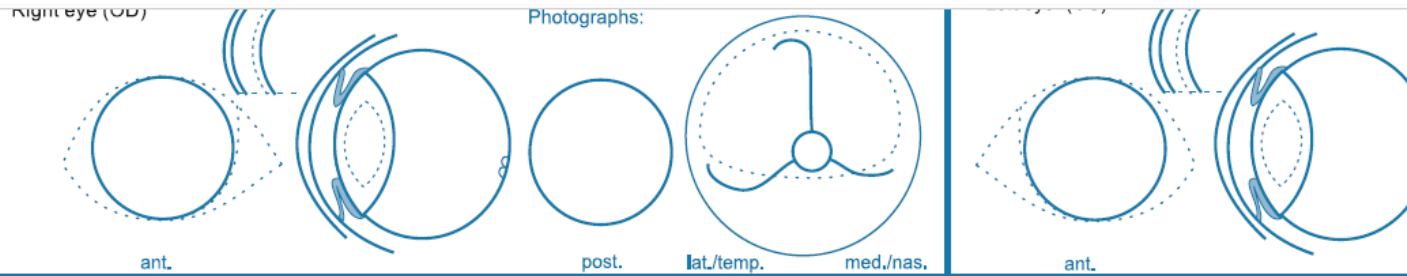
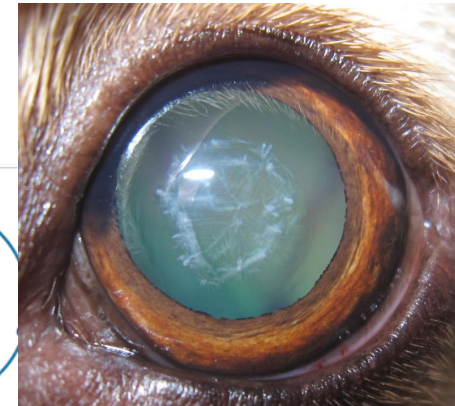
Bengal cat, 1.5 y, nuclear cataract OU

Slides: M.Richter

Slide: G. Chaudieu



# new printed ECVO Certificate



Descriptive comments: .....

.....

.....

Eye disease no. ....  severe

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent

8. ICAA: PLA
- mild
  - moderate
  - severe
- ICA (width)
- narrow (moderate)
  - closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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 type="checkbox"/>
8. IridoCorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner

# I. PK-HED: cataract – news regarding guidelines

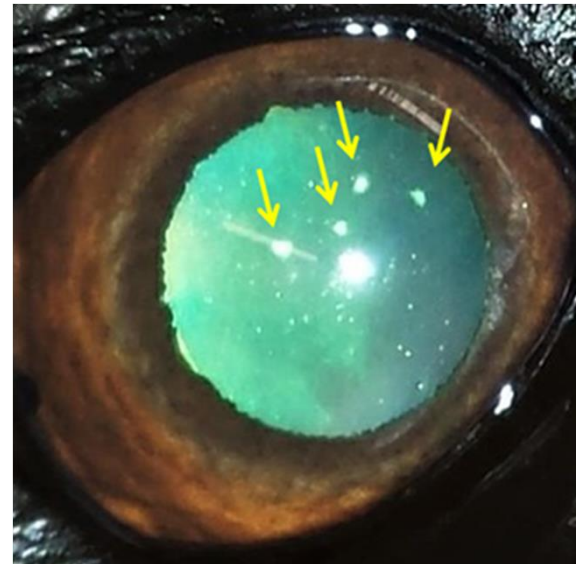
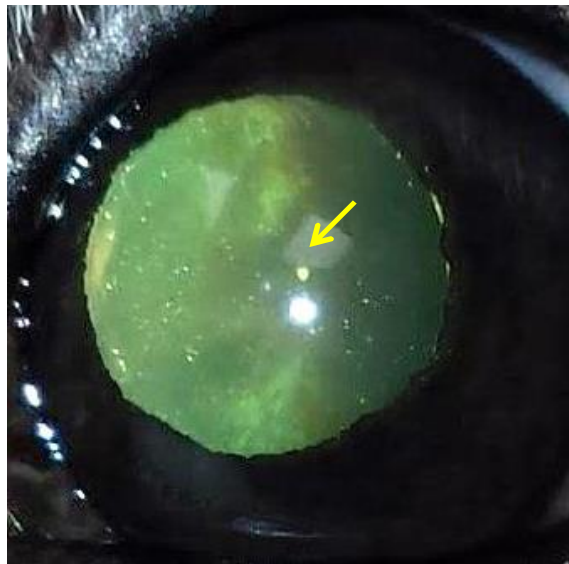
## Other lens opacities/cataracts: 15. cataract (non-congenital) – «other»

- “ 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 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.

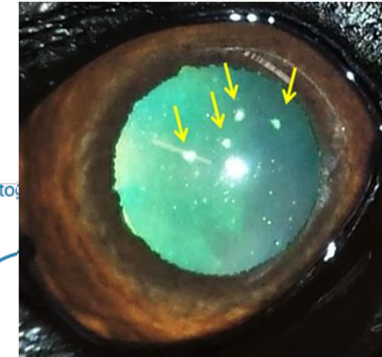


Other lens opacities/cataracts: **15. cataract (non-congenital) – «other»**

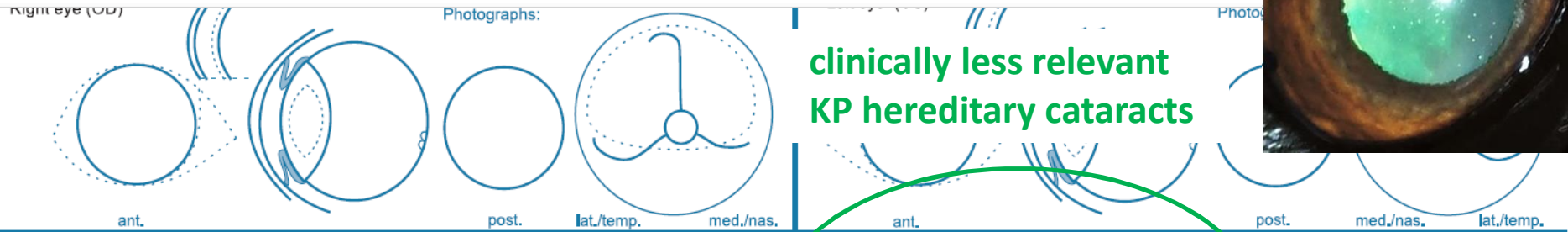
” Punctate: one or more *clearly defined* whitish dot like opacities located in the cortex or nucleus



Slides: M.Richter



clinically less relevant  
KP hereditary cataracts



Descriptive comments:

.....  
.....  
.....

Eye disease no. ....  severe

15. Cataract other:  punctata  
 suture line tip  
 suture line  
 nuclear ring  
 nuclear fiberglass/pulverulent

18. ICAA: PLA  mild  
 moderate  
 severe

ICA (width)  narrow (moderate)  
 closed (severe)

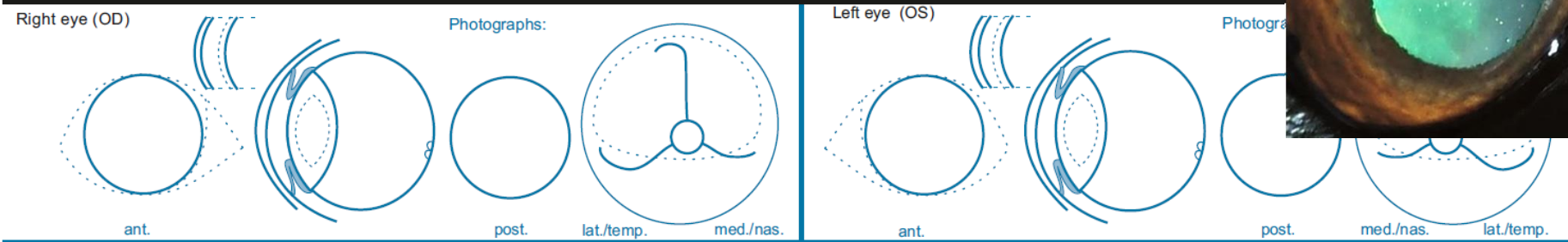
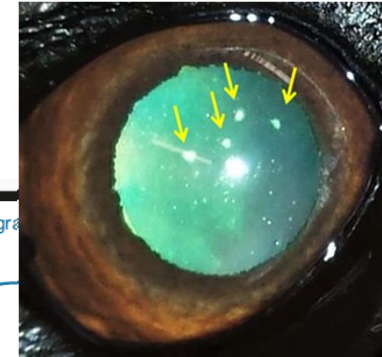
**Results for the known or presumed hereditary eye diseases (KP-HED):**      **Results valid for 12 months**

	UNAFFECTED *	UNDETERMINED **	AFFECTED *		UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input 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 type="checkbox"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macrolabopharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear <input checked="" type="checkbox"/> other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Interpretation**

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

**FOR FUTURE INFORMATION:** P.T.O. | Examiner



Descriptive comments: **15. other: punctata**

8. ICAA: PLA  mild  moderate  severe  
 ICA width  narrow (moderate)  closed (severe)

Eye disease no.  mild  severe

Results for the known or presumed hereditary eye diseases (KP-HED):				Results valid for 12 months			
	UNAFECTED *	UNDETERMINED **	AFFECTED *	UNAFECTED *	SUSPICIOUS ***	AFFECTED *	
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens <input type="checkbox"/> cornea <input type="checkbox"/> lamina	<input 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 type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> ant. cortex <input type="checkbox"/> punctate <input type="checkbox"/> nucleus <input type="checkbox"/> other
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. IntraCorneal Angle Abnormality. (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Entropion/Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Ectropion/Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. Distichiasis /Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner

Other lens opacities/cataracts: **15. cataract (non-congenital) – «other»**

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

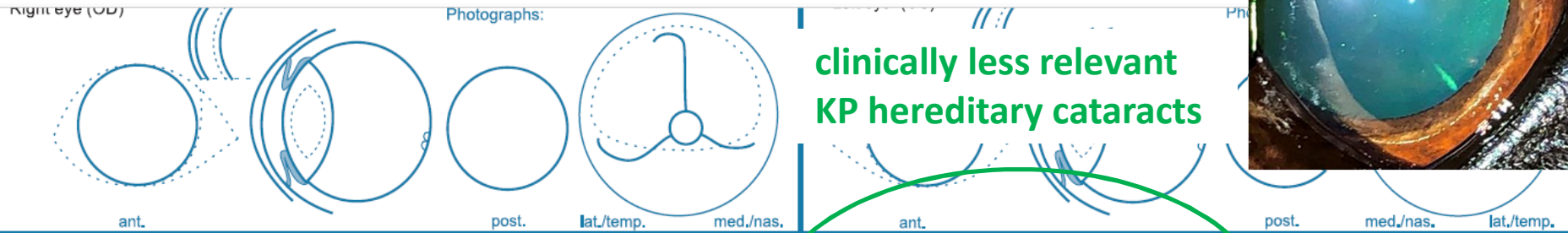
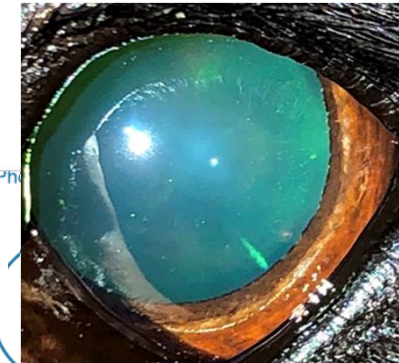


Slide: M. Richter





# new printed ECVO Certificate



clinically less relevant  
KP hereditary cataracts

Descriptive comments:

.....  
.....  
.....

Eye disease no. ....  severe

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent

18. ICAA: PLA
- mild
  - moderate
  - severe
- ICA (width)
- narrow (moderate)
  - closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

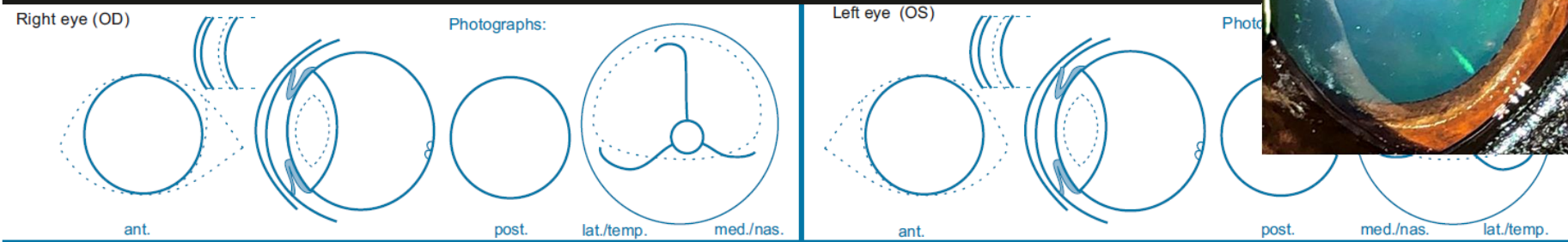
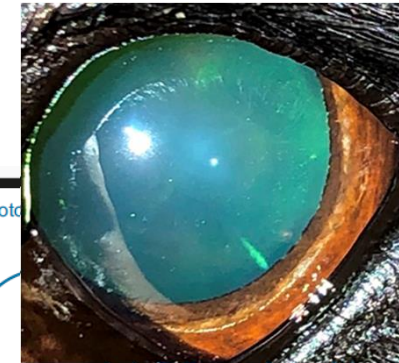
	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macoblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear <input checked="" type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
- \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.
- \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTURE INFORMATION: P.T.O.

Examiner



Descriptive comments: **15. other: suture line tips**

.....

.....

8. ICAA: PLA       mild       moderate       severe

ICA width       narrow (moderate)       closed (severe)

Eye disease no.       mild       severe

Results for the known or presumed hereditary eye diseases (KP-HED):				Results valid for 12 months			
	* UNAFFECTED	** UNDETERMINED	* AFFECTED		* UNAFFECTED	*** SUSPICIOUS	* AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens	<input type="checkbox"/> cornea <input type="checkbox"/> lamina	<input 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 type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input 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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<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:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. IntraCorneal Angle Abnormality. (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Entropion/Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion/Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis /Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> anterior <input type="checkbox"/> posterior <input type="checkbox"/> nucleus <input type="checkbox"/> other	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

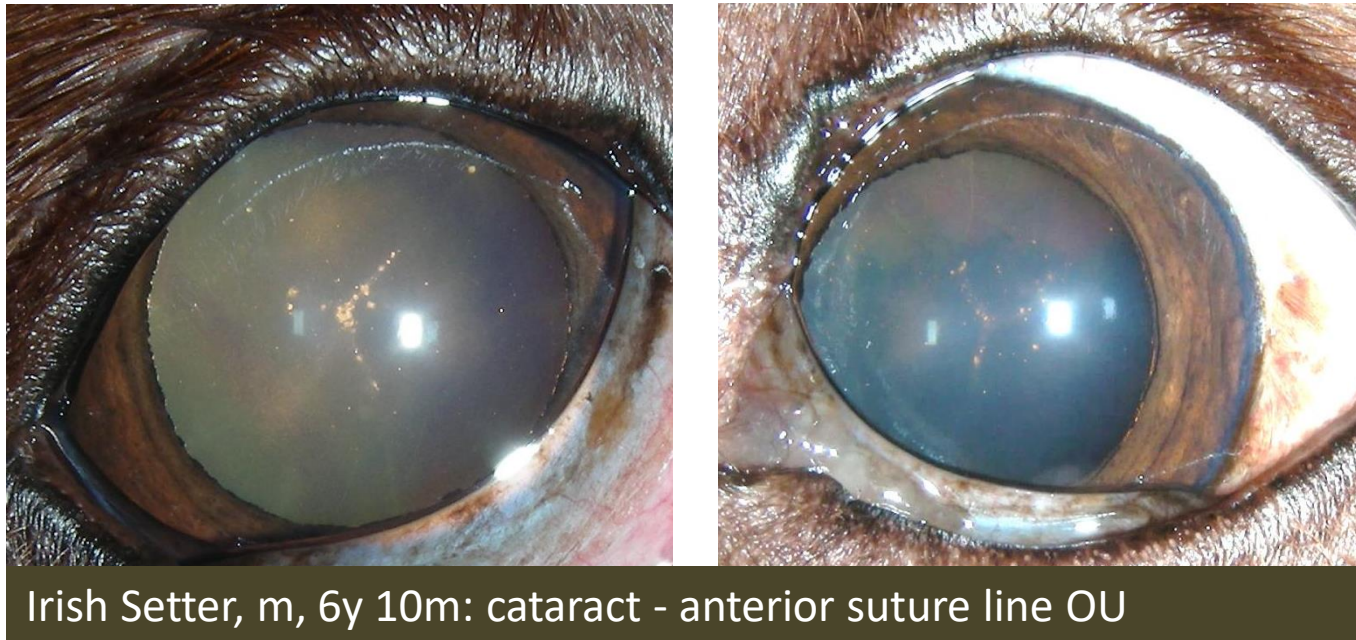
### Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O.      Examiner

Other lens opacities/cataracts: **15. cataract (non-congenital) – «other»**

- ” 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.



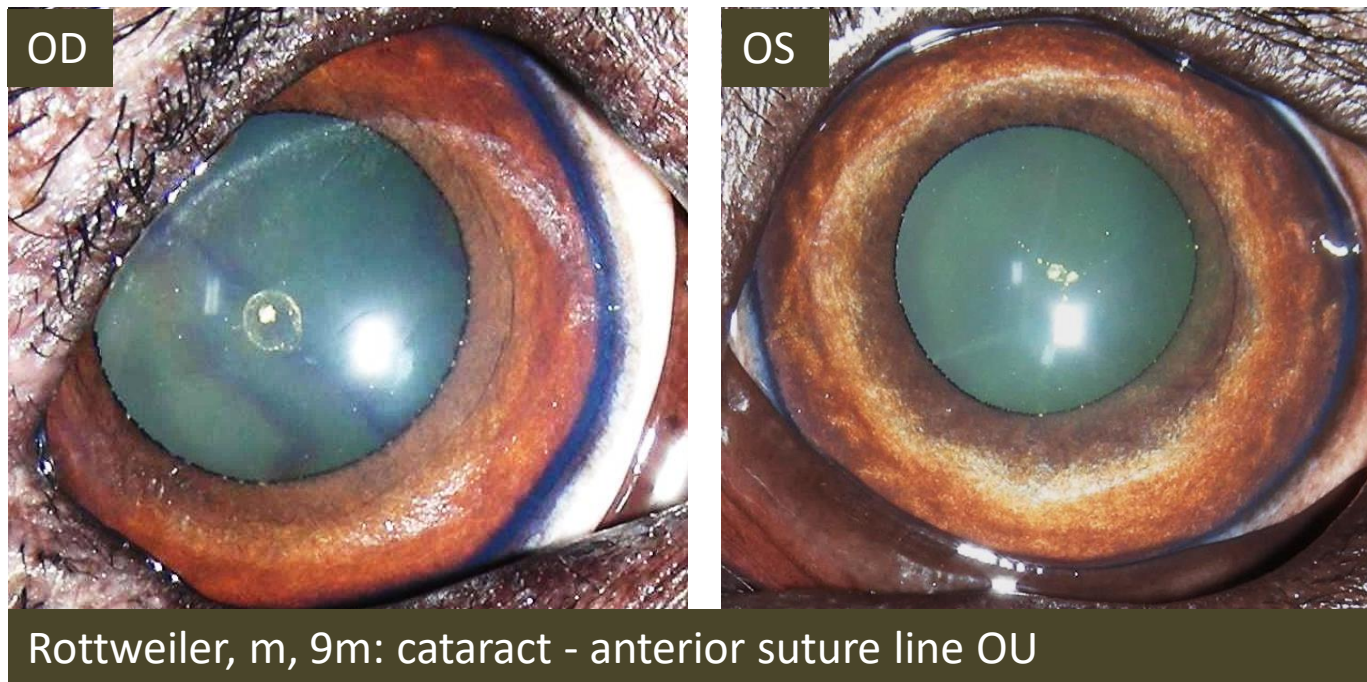
Irish Setter, m, 6y 10m: cataract - anterior suture line OU

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 «cortical»



Rottweiler, m, 4y

Slide: S. Jalomäki

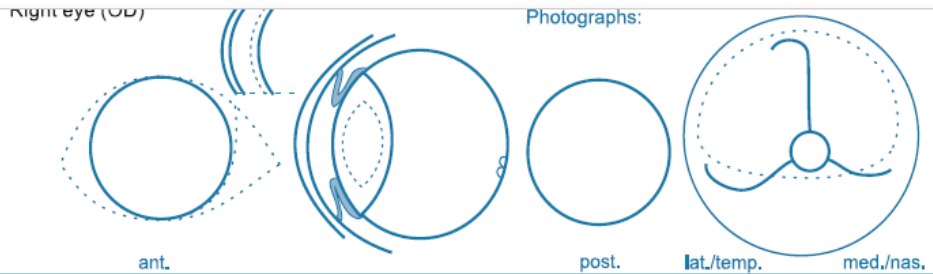
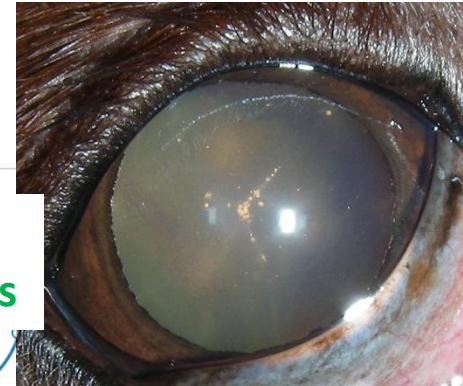


Czaja Airdale Terrier 5y 4m

Slide: S. Hertslet



# new printed ECVO Certificate



clinically less relevant  
KP hereditary cataracts

Descriptive comments:

.....  
.....  
.....

Eye disease no. ....  severe

15. Cataract other:  punctata  
 suture line tip  
 suture line  
 nuclear ring  
 nuclear fiberglass/pulverulent

18. ICAA: PLA  mild  
 moderate  
 severe  
ICA (width)  narrow (moderate)  
 closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *	
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input 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"/>	<input type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

## Results valid for 12 months

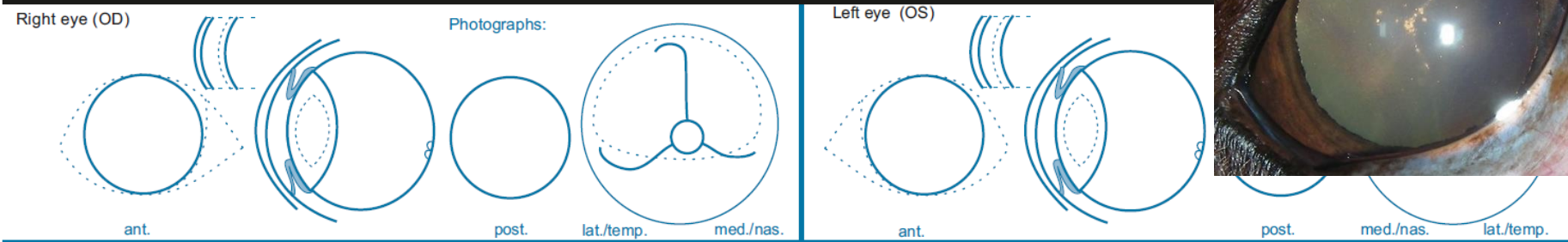
	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear <input checked="" type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTURE INFORMATION: P.T.O. | Examiner





Descriptive comments: **15. other: suture line**

8. ICAA: PLA  mild  moderate  severe  
 ICA width  narrow (moderate)  closed (severe)

Eye disease no.  mild  severe

Results for the known or presumed hereditary eye diseases (KP-HED):				Results valid for 12 months			
	* UNAFFECTED	** UNDETERMINED	* AFFECTED		* UNAFFECTED	*** SUSPICIOUS	* AFFECTED
1. Persistent Pupillary Membrane (PPM)	<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 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 type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6	12. Ectropion/Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Distichiasis /Ectopic cilia	<input 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	14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> anterior <input type="checkbox"/> punctate
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> nucleus <input checked="" type="checkbox"/> other
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid. hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:	16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe	17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. IntraCorneal Angle Abnormality. (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner

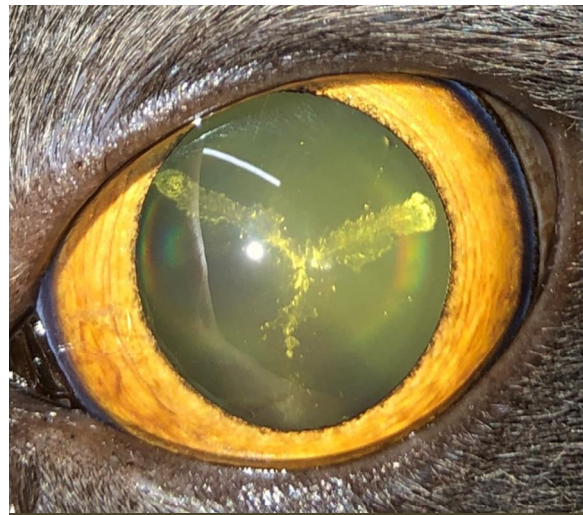
## Further instructions for filling out the ECVO form

If cataracts associated with the suture lines extend into the cortex: **Tick at 15. cataract (non-congenital) - «cortical»**



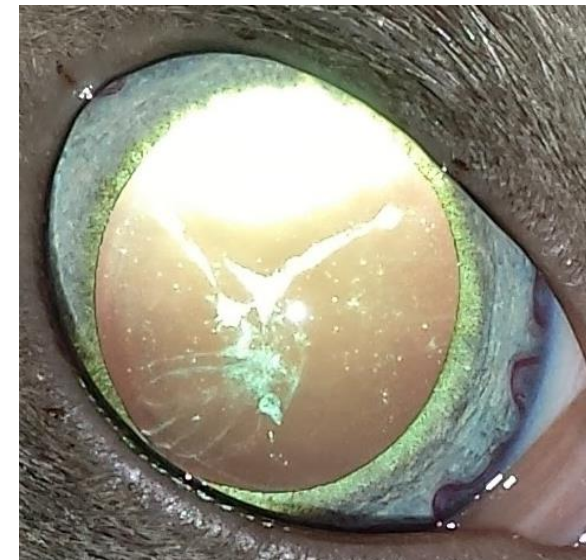
German Shepherd, 1y, f, unilateral

Slide: Tierspital Zürich



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

Slide: F. Matheis



Thai Siamese cat, f, 3y

Slide: M.Richter

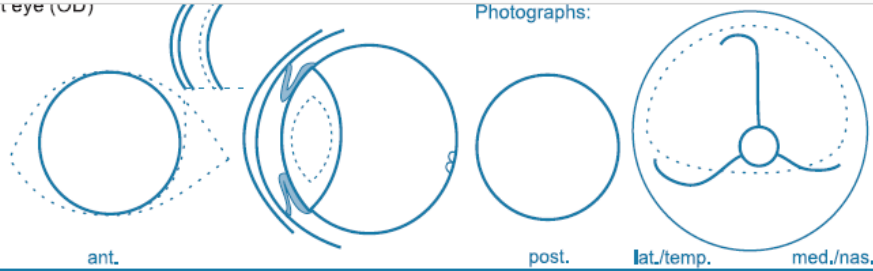




# new printed ECVO Certificate

Right eye (OD)

Photographs:



Descriptive comments:

.....  
 .....  
 .....

Eye disease no. ....  severe

15. Cataract other:

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

8. ICAA: PLA

- mild
- moderate
- severe

ICA (width)  narrow (moderate)  closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<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 type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6
3. Cataract (congenital)	<input 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

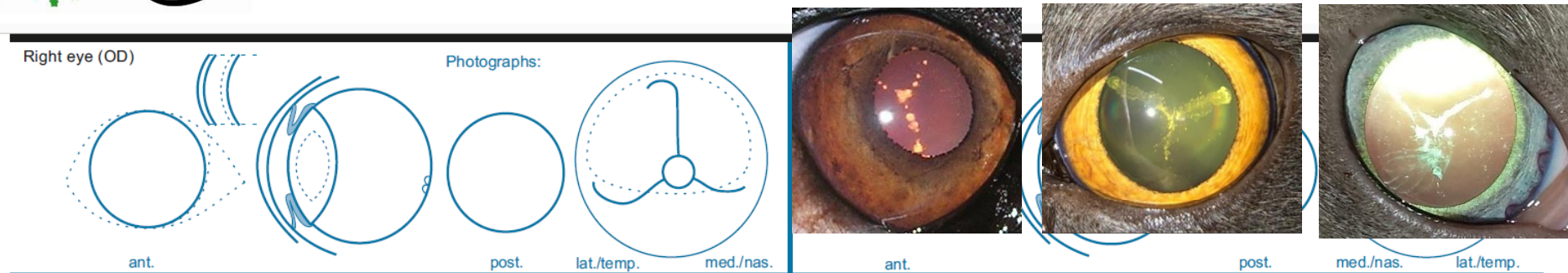
\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner

# present on-line ECVO certificate



Descriptive comments: .....

.....

.....

8. ICAA: PLA  mild  moderate  severe

ICAA width  narrow (moderate)  closed (severe)

Eye disease no. ....  mild  severe

Results for the known or presumed hereditary eye diseases (KP-HED):				Results valid for 12 months			
	* UNAFFECTED	** UNDETERMINED	* AFFECTED		* UNAFFECTED	*** SUSPICIOUS	* AFFECTED
1. Persistent Pupillary Membrane (PPM)	<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 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 type="checkbox"/> grade 1 <input type="checkbox"/> grade 2-6	12. Ectropion/Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Distichiasis /Ectopic cilia	<input 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	14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> ant. cortex <input checked="" type="checkbox"/> endothelium <input type="checkbox"/> nucleus <input type="checkbox"/> other
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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:	16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del>8. IdoCorneal Angle Abnormality. (ICAA)</del>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe	18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

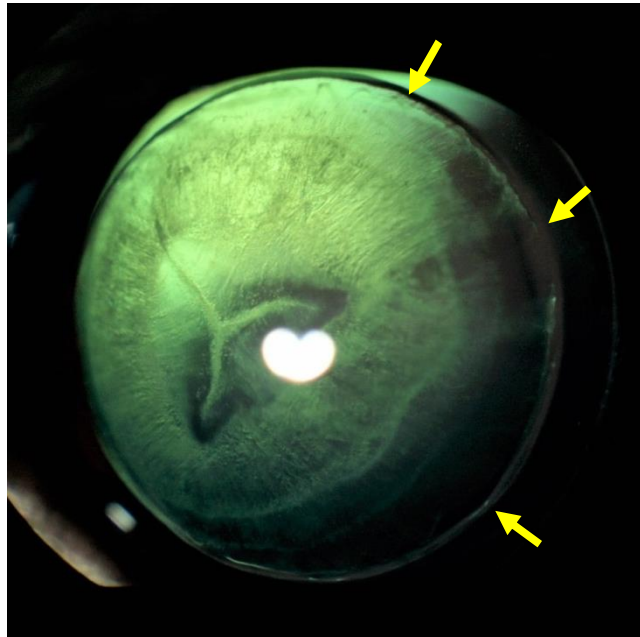
### Interpretation

- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
- \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.
- \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner

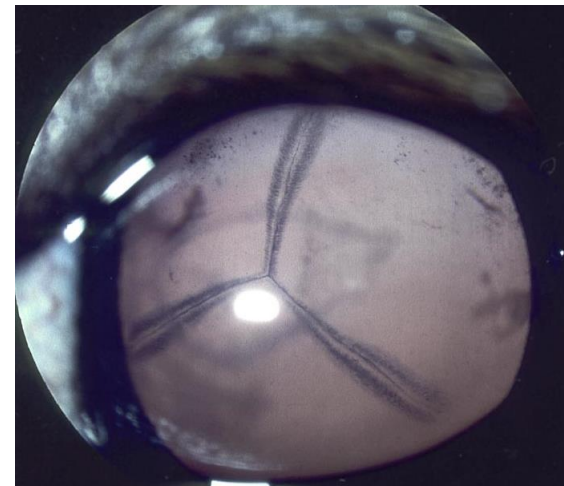
## Further instructions for filling out the ECVO form

If cataracts associated with the suture lines extend into the cortex: Tick at 15. cataract (non-congenital) - «cortical»



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

Slide: G. Chaudieu

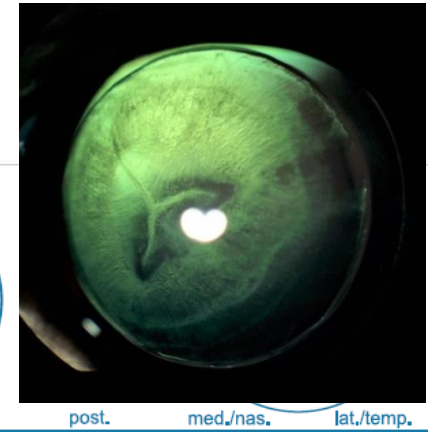


breed and age unknown

Slide: F. Stades

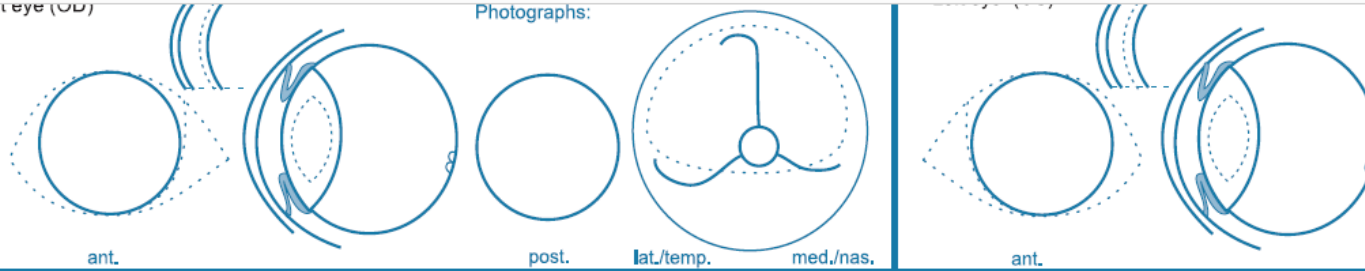


# new printed ECVO Certificate



Right eye (OD)

Photographs:



Descriptive comments:

.....  
 .....  
 .....

Eye disease no. ....  severe

15. Cataract other:

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

8. ICAA: PLA

- mild
- moderate
- severe

ICA (width)

- narrow (moderate)
- closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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: <b>microphakia</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

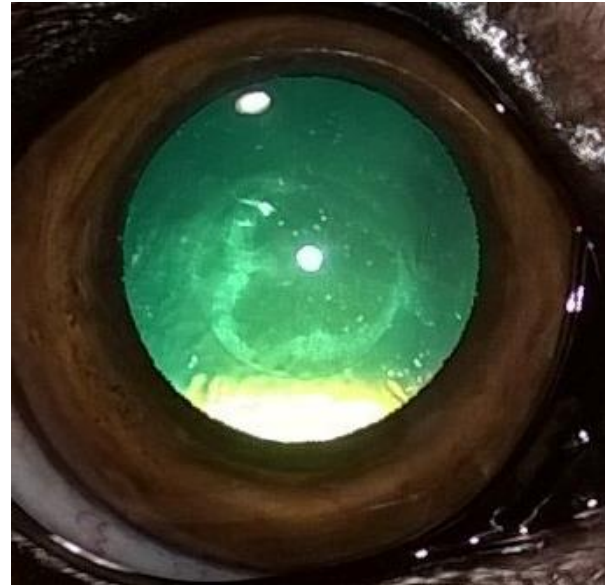
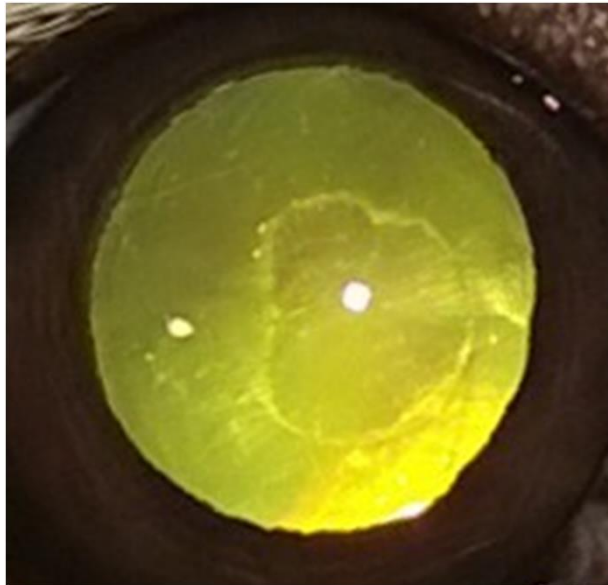
FOR FURTHER INFORMATION: P.T.O.

Examiner



Other lens opacities/cataracts: **15. cataract (non-congenital) – «other»**

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



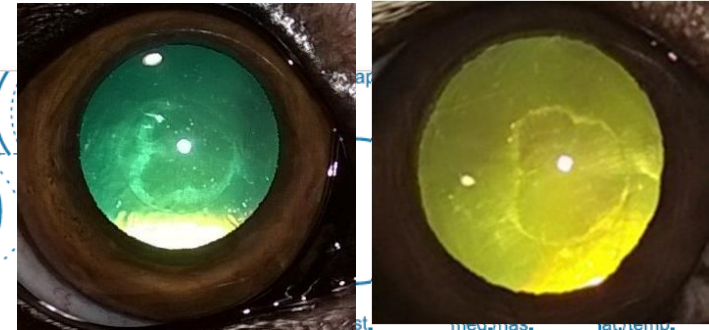
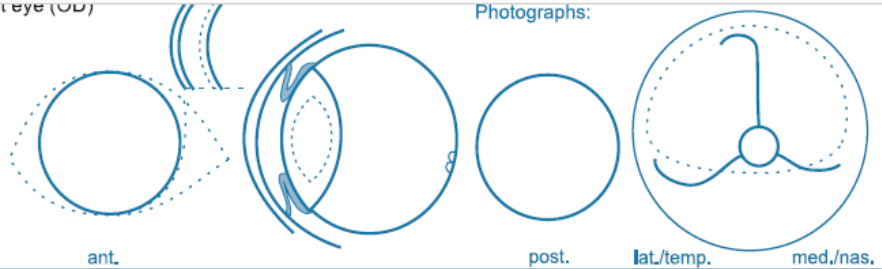
Slides: C. Bundgaard



# new printed ECVO Certificate

Right eye (OD)

Photographs:



Descriptive comments:

.....  
 .....  
 .....

Eye disease no. ....  severe

15. Cataract other:

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

8. ICAA: PLA

- mild
- moderate
- severe

ICA

- narrow (moderate)
- closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	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 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"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	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 (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input checked="" type="checkbox"/> other
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 known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

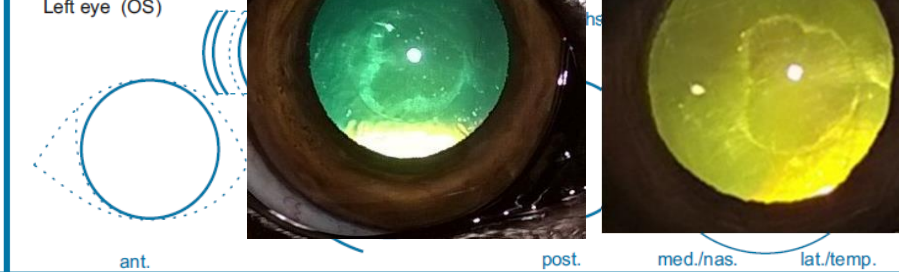
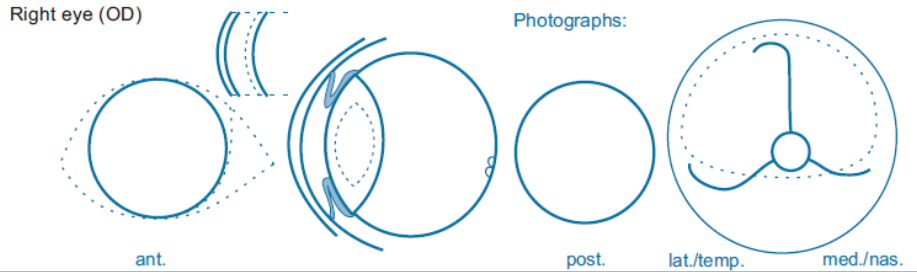
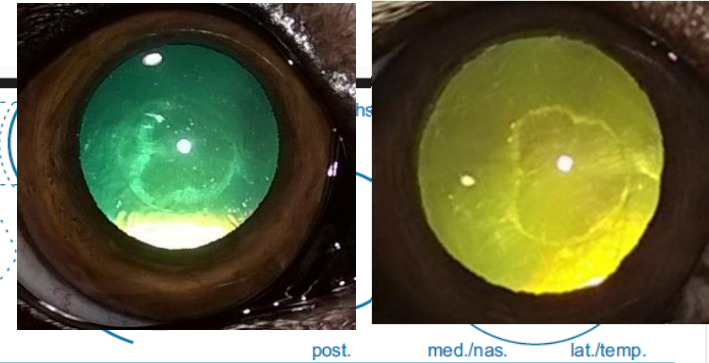
\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner

# present on-line ECVO certificate



Descriptive comments: **15. other: nuclear ring**

8. ICAA: PLA  mild  moderate  severe  
 ICA width  narrow (moderate)  closed (severe)

Eye disease no.  mild  severe

Results for the known or presumed hereditary eye diseases (KP-HED):				Results valid for 12 months				
	* UNAFFECTED	** UNDETERMINED	* AFFECTED		* UNAFFECTED	*** SUSPICIOUS	* 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"/>	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 type="checkbox"/>	grade 1 <input type="checkbox"/> grade 2-6 <input type="checkbox"/>	12. Ectropion/Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		13. Distichiasis /Ectopic cilia	<input 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 <input type="checkbox"/>	14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> ant. cortex <input checked="" type="checkbox"/> subcapsular <input checked="" type="checkbox"/> nucleus <input checked="" type="checkbox"/> other
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	choroid. hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other: <input type="checkbox"/>	16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<del>8. IntraCorneal Angle Abnormality. (ICAA)</del>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	mild <input type="checkbox"/> moderate <input type="checkbox"/> severe <input type="checkbox"/>	18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

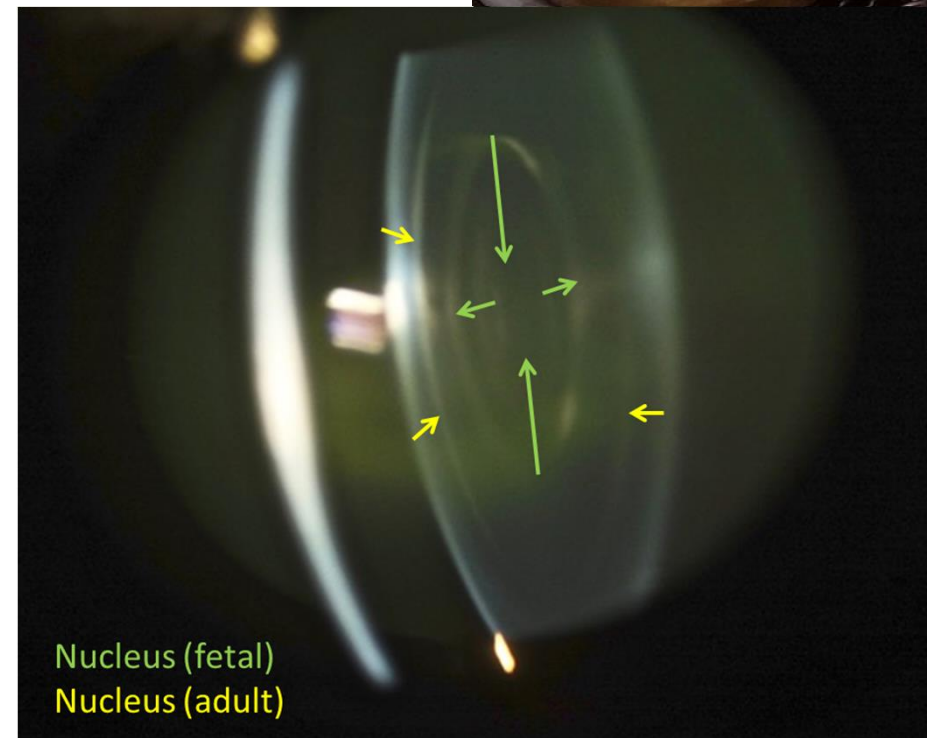
### Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner

## Not to be confused with:

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

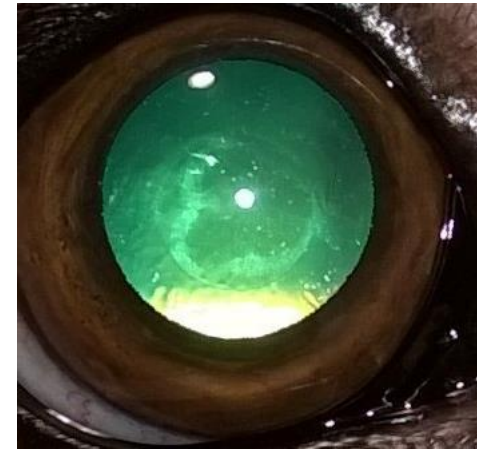


Slide: L. Karlstam



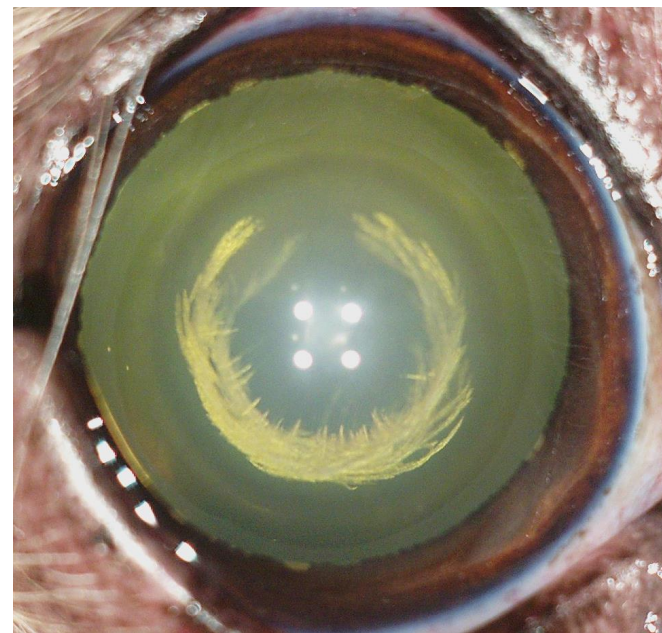
**Not to be confused with:**

Ring-shaped **nuclear cataract** (*dense whitish*)



Golden Retriever, m, 1y2m

Slides: S.Hertslet

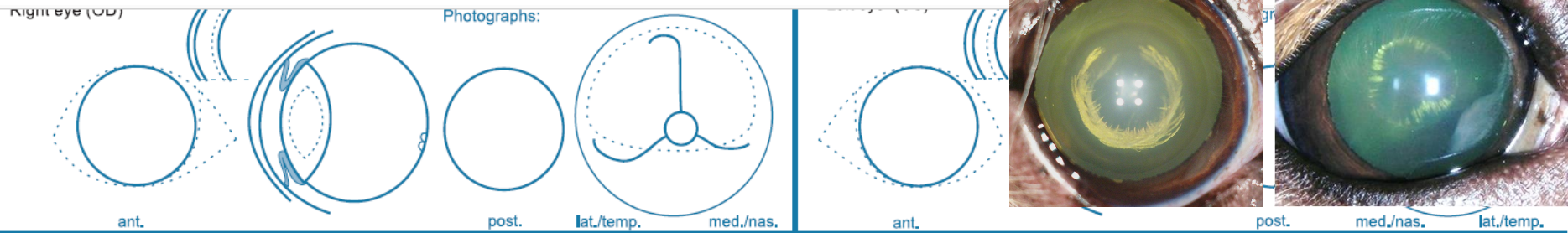


Bichon Frise, m, 7y, unilateral

Slide: HED session Antwerp 2019



# new printed ECVO Certificate



Descriptive comments: .....

Eye disease no. ....  severe

15. Cataract other:  punctata  
 suture line tip  
 suture line  
 nuclear ring  
 nuclear fiberglass/pulverulent
8. ICAA: PLA  mild  
 moderate  
 severe
- ICA (width)  narrow (moderate)  
 closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.  
 \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.  
 \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner

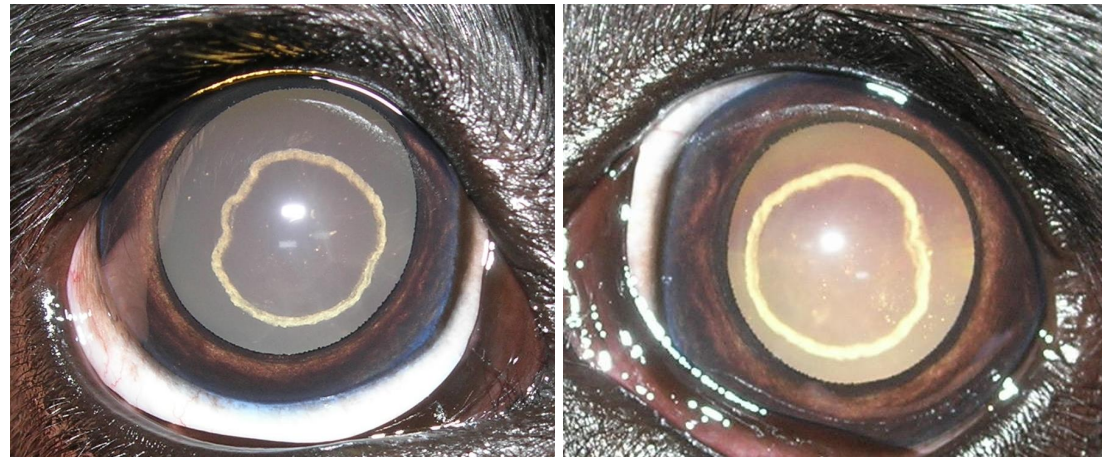
## Further instructions for filling out the ECVO form

If the ring-shaped cataract is perinuclear (= cortex):

Tick at 15. cataract - «cortical»

If the ring-shaped cataract is within the nucleus:

Tick at 15. cataract - «nuclear»



Flat Coated Retriever, 6 months, f, bilateral

Slides: Tierspital Zürich



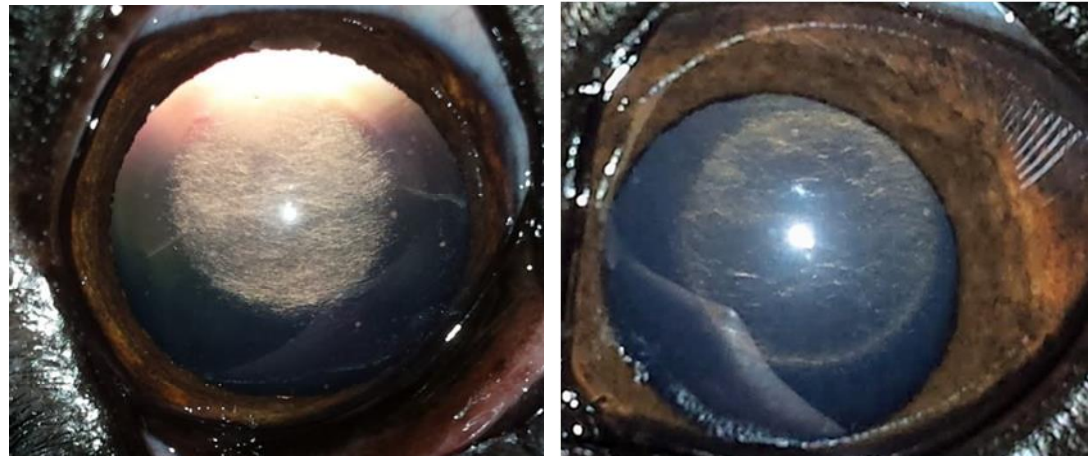
**Other lens opacities/cataracts: 15. cataract (non-congenital) – «other»**

- ” 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



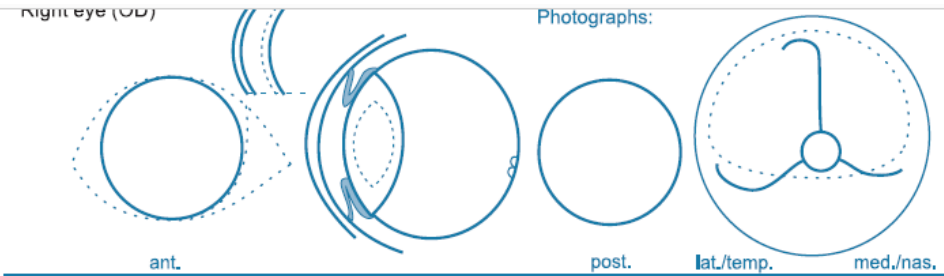
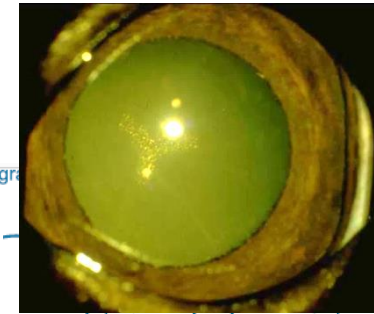
English Cocker Spaniel, 7y, bilateral

Slides: M.Richter





# new printed ECVO Certificate



clinically less relevant  
KP hereditary cataracts

Descriptive comments:

.....  
.....  
.....

Eye disease no. ....  severe

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent

### Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	

### Results valid for 12 months

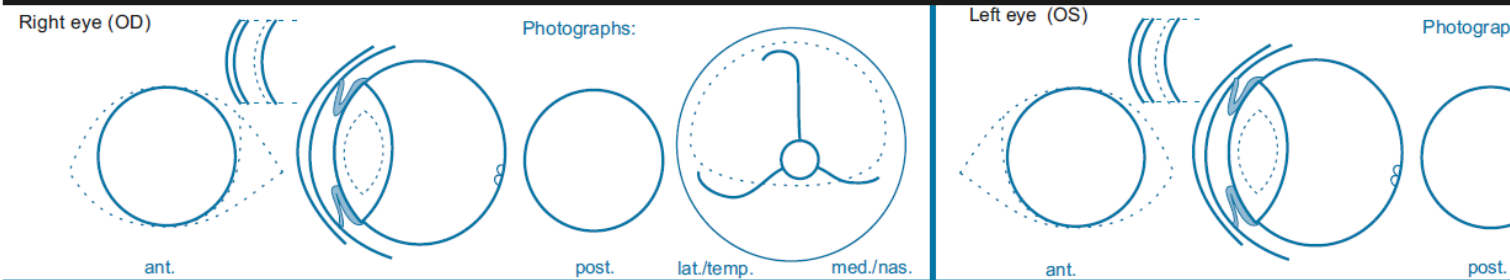
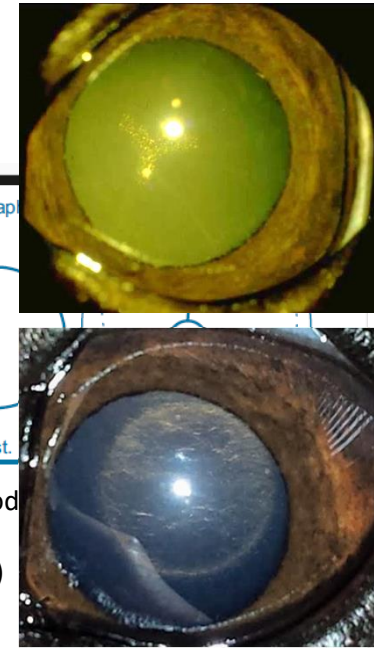
	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> cortical <input checked="" type="checkbox"/> post. pol. <input checked="" type="checkbox"/> nuclear <input checked="" type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

### Interpretation

- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
- \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.
- \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner



Descriptive comments: **15. other: nuclear fiberglass/pulverulent**

8. ICAA: PLA  mild  moderate  severe

ICA width  narrow (moderate)

Eye disease no.  mild  severe

Results for the known or presumed hereditary eye diseases (KP-HED):			
	* UNAFFECTED	** UNDETERMINED	* AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> iris <input type="checkbox"/> lens <input type="checkbox"/> cornea <input type="checkbox"/> lamina
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 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 type="checkbox"/>
8. IntraCorneal Angle Abnormality. (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

Results valid for 12 months			
	* UNAFFECTED	*** SUSPICIOUS	* AFFECTED
11. Entropion/Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion/Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis /Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> anterior <input type="checkbox"/> punctate
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> nucleus <input checked="" type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

**Interpretation**

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner



## I. PK-HED: cataract – news regarding vet advice

Vet advice – present text:

Cataract (hereditary, non-congenital): NO BREEDING from the affected animal.  
Note: different advice may be given for specific breeds; and for the cataract punctate in any breed: optional (low priority)

### **Vet advice – new text:**

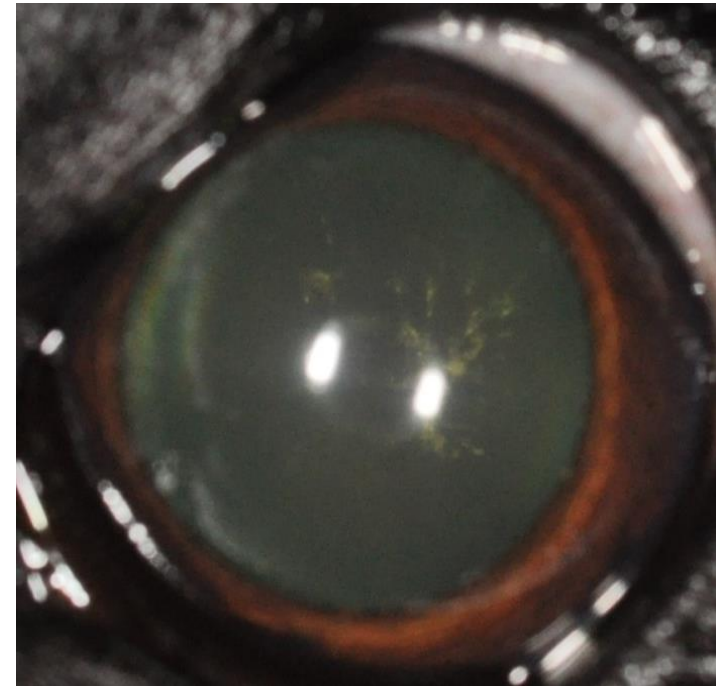
Cataract (hereditary, non-congenital): the breeding recommendation differentiates between clinically important and optional, low priority forms of cataracts

- Cataract „cortical“: vet advice = no breeding
- Cataract „post. pol“: vet advice = no breeding
- Cataract „nucleus“: vet advice = no breeding
- Cataract “other”: 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

## Opacities on the anterior or posterior lens capsule

These opacities on the lens capsule should **NOT** be ticked at 3. cataract (congenital) or at 15. cataract (non-congenital)

- “ whitish spiderweb-like opacities on the posterior lens capsule (uni- or bilateral)
- “ tiny (flat, not fibrotic/not hyperplastic) pigmented dots scattered on the posterior capsule
- “ PPM (if limited to insertion site)
- “ PHA (if limited to insertion site)
- “ PHTVL/PHPV



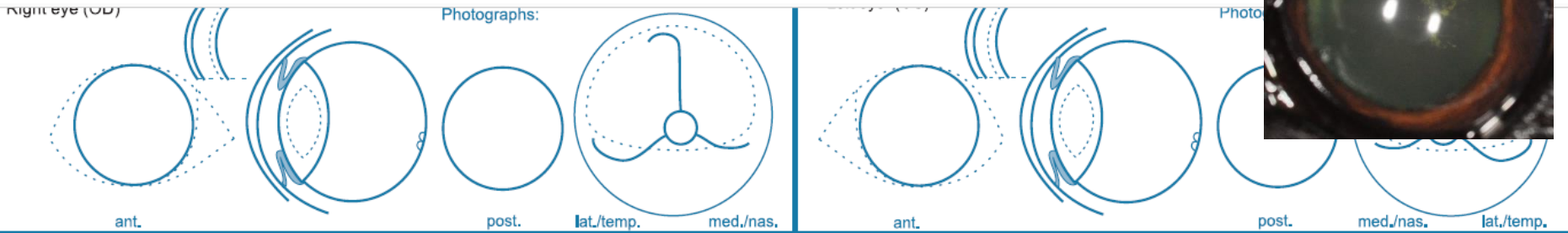
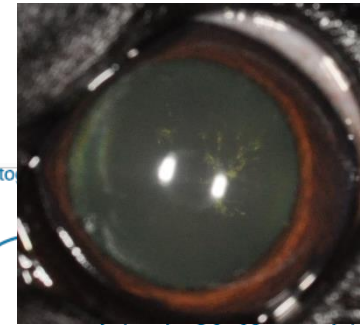
Flat Coated Retriever

Slide: A.Rampazzo





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Descriptive comments:

**OU: whitish spiderweb-like opacities on the post. lens capsule**

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent

8. ICAA: PLA
- mild
  - moderate
  - severe
- ICA (width)
- narrow (moderate)
  - closed (severe)

Eye disease no.  severe

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macoblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
- \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.
- \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner

## Opacities on the anterior or posterior lens capsule

These opacities on the lens capsule are NOT to be ticked at 3. cataract (congenital) or at 15. cataract (non-congenital)

- “ whitish spiderweblike opacities on the posterior lens capsule (uni- or bilateral)
- “ tiny (flat, not fibrotic/not hyperplastic) pigmented dots scattered on the posterior capsule
- “ PPM (if limited to insertion site)
- “ PHA (if limited to insertion site)
- “ PHTVL/PHPV

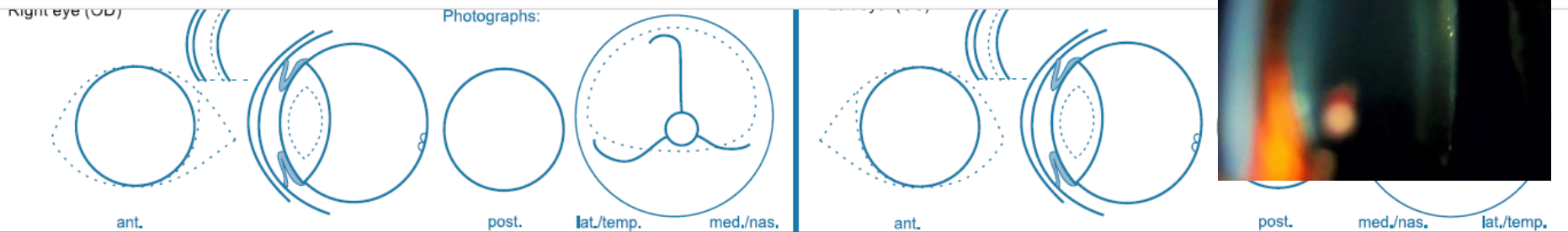


Miniature Schnauzer

Slides: L. Karlstam



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Descriptive comments:

**tiny pigment dots on the post. lens capsule**

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent

8. ICAA: PLA
- mild
  - moderate
  - severe
- ICA (width)
- narrow (moderate)
  - closed (severe)

Eye disease no.  severe

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
- \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.
- \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Do not confuse with:

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

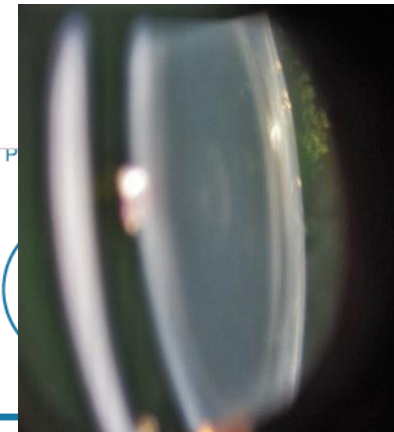


Slides: L.Karlstam





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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.

Right eye (OD)

Photographs:

D

Eye disease no.  severe

- suture line
- nuclear ring
- nuclear fiberglass/pulverulent
- 8. ICAA: PLA  mild
- moderate
- severe
- ICA  narrow (moderate)
- (width)  closed (severe)

Results for the known or presumed hereditary eye diseases (KP-HED):				Results valid for 12 months			
	UNAFFECTED *	UNDETERMINED **	AFFECTED *		UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	iris <input type="checkbox"/> cornea	11. Entropion / Trichiasis	<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"/> grade 1	lens <input type="checkbox"/> lamina	12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> grade 2-6	(multi)focal <input type="checkbox"/>	13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	geographical <input type="checkbox"/>	14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	total <input type="checkbox"/>	15. Cataract (non-congenital)	<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"/>	16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	coloboma <input type="checkbox"/>	17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	other: <input type="checkbox"/>	18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>
				mild <input type="checkbox"/>			
				moderate <input type="checkbox"/>			
				severe <input type="checkbox"/>			

### Interpretation

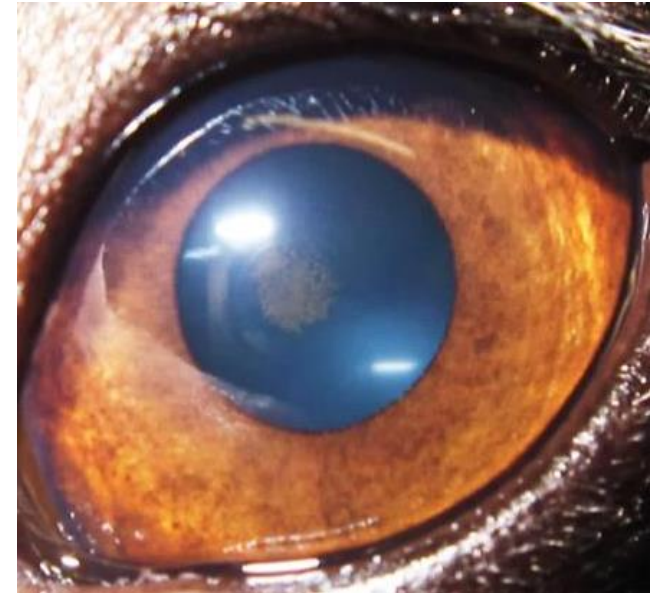
- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
- \*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.
- \*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

FOR FUTHER INFORMATION: P.T.O. | Examiner

## Opacities on the anterior or posterior lens capsule

These opacities on the lens capsule are NOT to be ticked at 3. cataract (congenital) or at 15. cataract (non-congenital)

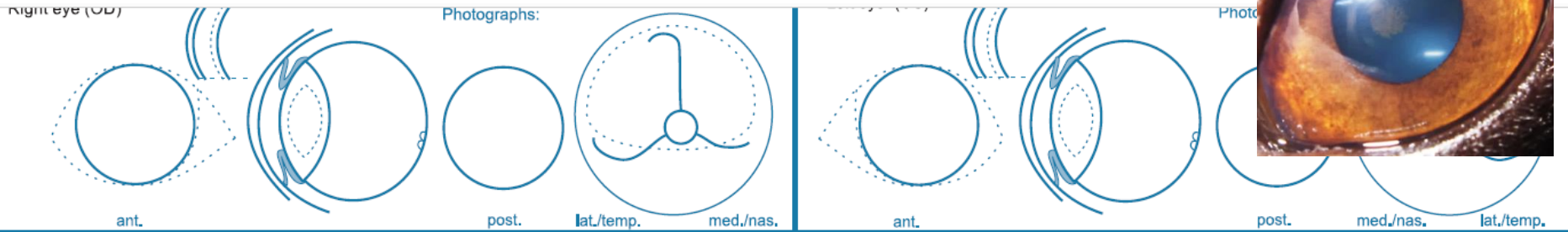
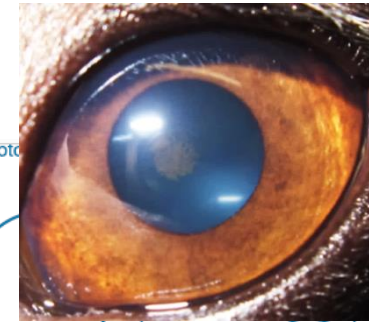
- “ whitish spiderweblike opacities on the posterior lens capsule (uni- or bilateral)
- “ tiny (flat, not fibrotic/not hyperplastic) pigmented dots scattered on the posterior capsule
- “ PPM (if limited to insertion site)
- “ PHA (if limited to insertion site)
- “ PHTVL/PHPV



Slide: M.Richter



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Descriptive comments:

**pigmented dots, centrally on the anterior capsule of the lens**

Eye disease no.  severe

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fibreglass/pulverulent

8. ICAA: PLA
- mild
  - moderate
  - severe
- ICA (width)
- narrow (moderate)
  - closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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 type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macropblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

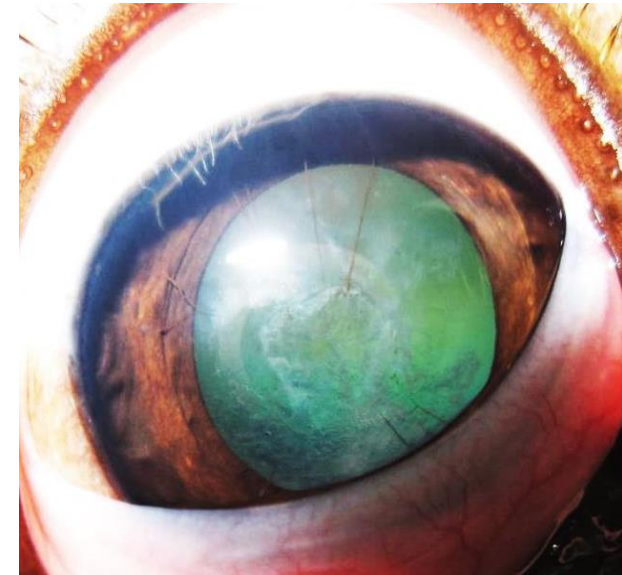
FOR FUTURE INFORMATION: P.T.O.

Examiner

## PPM & cataract

If the opacity on the lens (capsule) is limited to the insertion of the PPM, 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 “affected” at “3. Cataract (congenital). If there are other lens opacities not adjacent to the PPM, which might not be congenital, tick the relevant box at “15. Cataract (non-congenital)”.

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



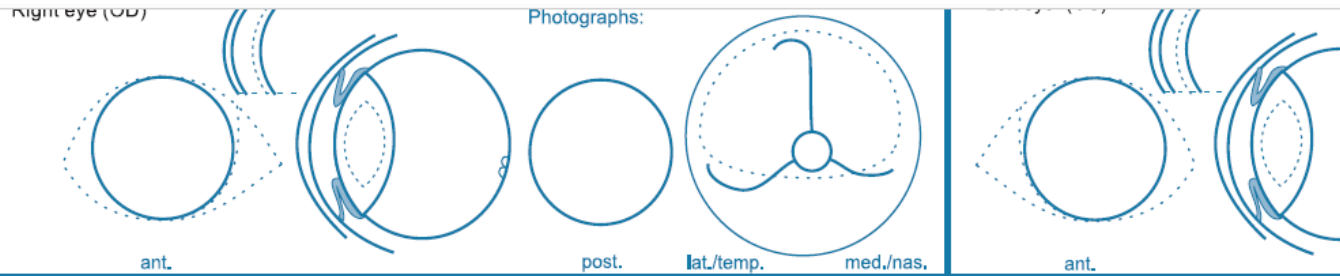
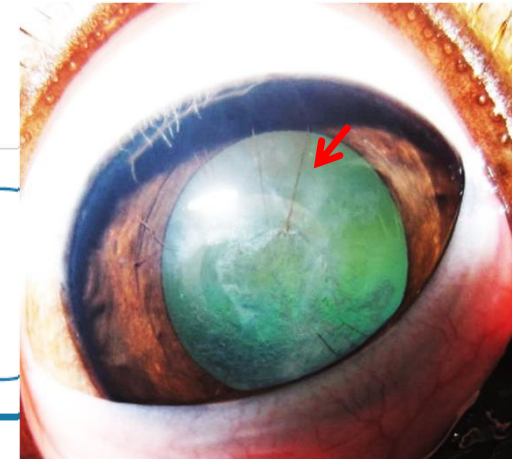
Petit Basset Griffon Vendeen, 8 month, f: microphthalmus, PPM iris-lens, cortical cataract OD (unilateral)

Slides: M.Richter





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Descriptive comments: .....

.....

.....

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fiberglass/pulverulent
- ICA (width)
- moderate
  - severe
  - narrow (moderate)
  - closed (severe)

Eye disease no. ....  severe

## Results for the known or presumed hereditary eye diseases (KP-HED):

	* UNAFFECTED	** UNDETERMINED	* AFFECTED
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Persistent Hyperpl. Tunica Vasculosa Lentis/Primary Vitreous (PHTVL/PHPV)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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"/>
7. Other: <b>Microphthalmos</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

iris  
 lens  
 cornea  
 lamina  
 grade 1  
 grade 2-6  
 (multi)focal  
 geographical  
 total  
 choroid, hypoplasia  
 coloboma  
 other:  
 mild  
 moderate  
 severe

## Results valid for 12 months

	* UNAFFECTED	*** SUSPICIOUS	* AFFECTED
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macropblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Lens luxation (primary)	<input 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 type="checkbox"/>

cortical  
 post. pol.  
 nuclear  
 other

## Interpretation

\* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.

\*\* The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

\*\*\* The animal displays minor, but specific clinical signs of the KP-HED mentioned. Further development will confirm the diagnosis. Reexamination in .....months.

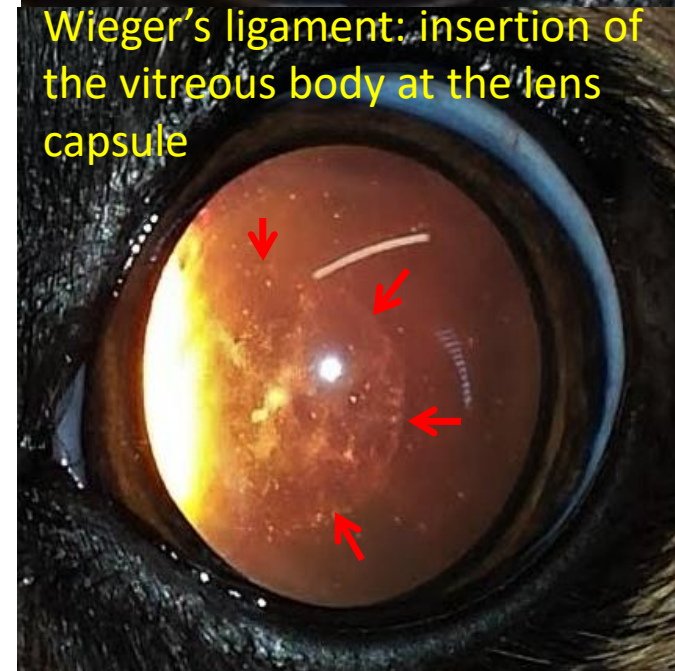
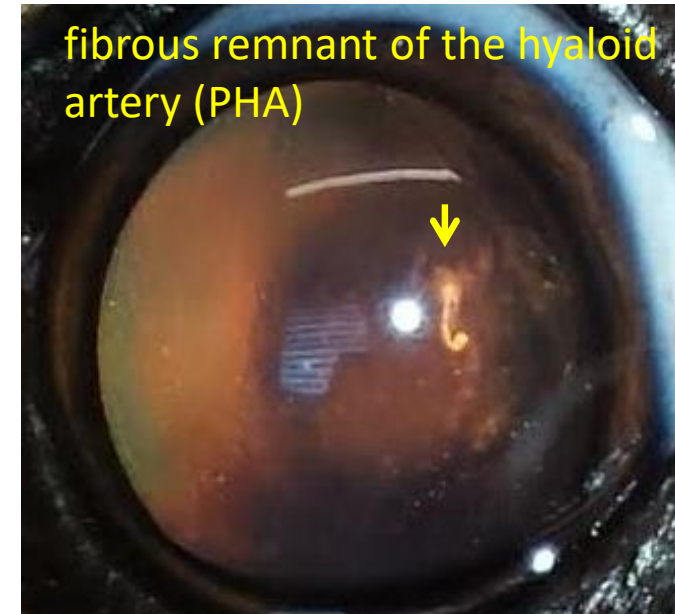
FOR FUTURE INFORMATION: P.T.O.

Examiner

## Opacities on the anterior or posterior lens capsule

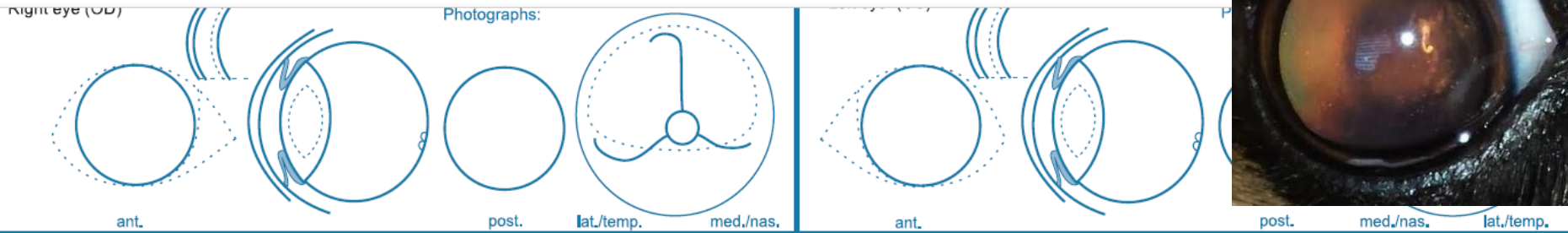
These opacities on the lens capsule are NOT to be ticked at 3. cataract (congenital) or at 15. cataract (non-congenital)

- “ whitish spiderweblike opacities on the posterior lens capsule (uni- or bilateral)
- “ tiny (flat, not fibrotic/not hyperplastic) pigmented dots scattered on the posterior capsule
- “ PPM (if limited to insertion site)
- “ PHA (if limited to insertion site)
- “ PHTVL/PHPV





# new printed ECVO Certificate



Descriptive comments: .....

.....

.....

Eye disease no. ....  severe

15. Cataract other:
- punctata
  - suture line tip
  - suture line
  - nuclear ring
  - nuclear fibreglass/pulverulent

8. ICAA: PLA
- mild
  - moderate
  - severe
- ICA (width)
- narrow (moderate)
  - closed (severe)

## Results for the known or presumed hereditary eye diseases (KP-HED):

	UNAFFECTED *	UNDETERMINED **	AFFECTED *
1. Persistent Pupillary Membrane (PPM)	<input 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 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: <b>Persistent hyaloid artery</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. IridoCorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

## Results valid for 12 months

	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> cortical <input type="checkbox"/> post. pol. <input type="checkbox"/> nuclear <input type="checkbox"/> other
16. Lens luxation (primary)	<input 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 type="checkbox"/>

## Interpretation

- \* "Unaffected" signifies that there is no clinical evidence of the known or presumed hereditary eye diseases (KP-HED) specified, whereas "affected" signifies that there is such evidence.
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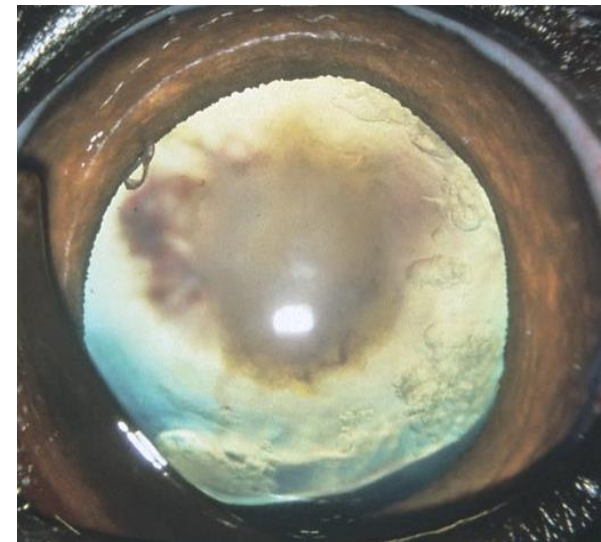
FOR FUTURE INFORMATION: P.T.O.

Examiner

## Opacities on the anterior or posterior lens capsule

These opacities on the lens capsule are NOT to be ticked at 3. cataract (congenital) or at 15. cataract (non-congenital)

- “ whitish spiderweblike opacities on the posterior lens capsule (uni- or bilateral)
- “ tiny (flat, not fibrotic/not hyperplastic) pigmented dots scattered on the posterior capsule
- “ PPM (if limited to insertion site)
- “ PHA (if limited to insertion site)
- “ PHTVL/PHPV (in grade 2-6 the lenticular abnormalities are part of the entity and are **not** to be ticked at “3. Cataract” and/or “7. Other”

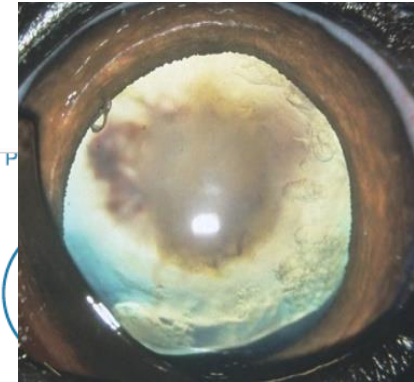


Marianne Richter,  
Dipl ECVO





# new printed ECVO Certificate



PHTVL: in grade 2-6 cataract and other lenticular abnormalities (like lenticonus, lens hypoplasia, spherophakia) are part of the entity and are **not** to be ticked at "3. Cataract" and/or "7. Other"

Right eye (OD)

Photographs:

Descr

.....  
 .....  
 .....

Eye disease no. ....  severe

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

8. ICAA: PLA  mild  
 moderate  
 severe
- ICA (width)  narrow (moderate)  
 closed (severe)

Results for the known or presumed hereditary eye diseases (KP-HED):				Results valid for 12 months			
	UNAFFECTED*	UNDETERMINED**	AFFECTED*		UNAFFECTED*	SUSPICIOUS***	AFFECTED*
1. Persistent Pupillary Membrane (PPM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	iris <input type="checkbox"/>	11. Entropion / Trichiasis	<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"/>	lens <input type="checkbox"/>	12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	grade 1 <input checked="" type="checkbox"/>	13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	grade 2-6 <input checked="" type="checkbox"/>	14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(multi)focal <input type="checkbox"/>	15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	geographical <input type="checkbox"/>	16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	total <input type="checkbox"/>	17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>
8. Iridocorneal Angle Abnormality (ICAA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	choroid, hypoplasia <input type="checkbox"/>	18. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>
				coloboma <input type="checkbox"/>			
				other: <input type="checkbox"/>			
				mild <input type="checkbox"/>			
				moderate <input type="checkbox"/>			
				severe <input type="checkbox"/>			

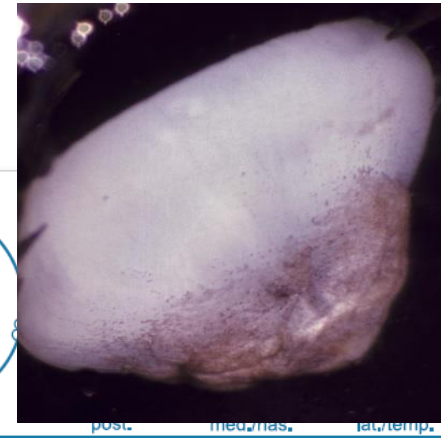
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FOR FUTHER INFORMATION: P.T.O. | Examiner



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Right eye (OD)

Photographs:

Desc

Eye disease no. \_\_\_\_\_  severe

nuclear ring  
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2. Persistent Hyperpl. Tunica Vasculosa Lenticularis/Primary Vitreous (PHTVL/PHPV)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	grade 1 <input checked="" type="checkbox"/> grade 2-6 <input checked="" type="checkbox"/>	12. Ectropion / Macroblepharon	<input type="checkbox"/>	<input type="checkbox"/>
3. Cataract (congenital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total <input type="checkbox"/>	13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<input type="checkbox"/>
4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other: <input type="checkbox"/>	14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>
5. Hypoplastic-/Micro-papilla	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	mild <input type="checkbox"/> moderate <input type="checkbox"/> severe <input type="checkbox"/>	15. Cataract (non-congenital)	<input type="checkbox"/>	<input type="checkbox"/>
6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		16. Lens luxation (primary)	<input type="checkbox"/>	<input type="checkbox"/>
7. Other: .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		17. Retinal degeneration (PRA)	<input type="checkbox"/>	<input type="checkbox"/>
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