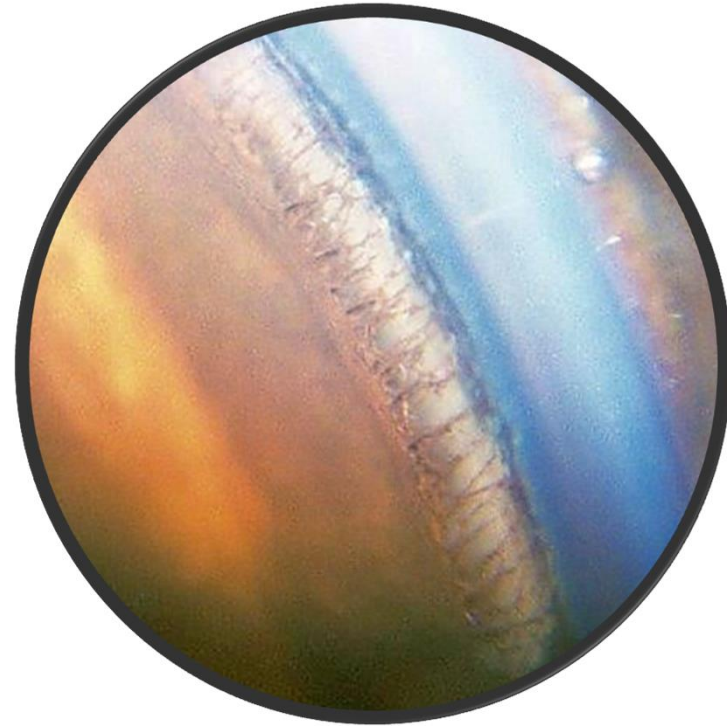




Gonioscopy – evaluation of the iridocorneal angle



presented (2017) & revised (2022) by
Marianne Richter (HED committee chair)

HED committee:

- “ Proposal of a **new grading system for gonioscopy** (draft by [M.Richter](#)), presented in Budapest 2016, **definitive since 2017**
- “ **gonioscopy sub-committee (2016):**
[B. Ekesten](#), [P. Bedford](#), [C. Bundgaard](#), [G.Chaudieu](#),
[A. Guandalini](#), [M. Richter](#)
- “ Slides are kindly provided by [B.Spiess](#)

Gonioscopy – evaluation of the iridocorneal angle (ICA):

- “ Rational: From clinical observations the **extent of PLA related to 360 angular degree** of the ICA **and the width of the ICA** seem to be important concerning the likelihood to develop glaucoma.
- “ **Grading** of abnormalities of the **iridocorneal angle (ICA)** by **evaluation of pectinate ligament (PL) and iridocorneal angle width (ICAW) over 360 degrees**
- “ **Identification/selection of dogs** with abnormalities of the ICA potentially leading to blindness: **severely affected dogs should be excluded from breeding**

HED Manual: Definitions & Guidelines

Two predominant types of involvement of the angle are distinguished. The pectinate ligament (PL) and the iridocorneal angle (ICA) width are evaluated by gonioscopy in its extent of 360 degrees.

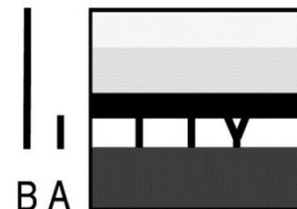
- “ **Pectinate ligament abnormality (PLA):** presumed hereditary eye disease; characterized by an abnormal PL that can be divided into 2 predominant types:
 - . Fibrae latae (FL) : fibres with a confluent (broad) base and shortened thin insertions at the cornea or thick fibres (<5 fibres)
 - . Laminae (LA): plates or sheets of continuous tissue (>5 fibres), with or without flow holes
- “ **Iridocorneal angle (ICA) width:** the width of the ICA is evaluated by comparison of the length of the pectinate ligament (A) and the distance from the origin of the pectinate ligament to the anterior surface of the cornea at the transection area (B);

Gonioscopy – evaluation of the iridocorneal angle (ICA):

Grading of the pectinate ligament abnormality (PLA):

- “ 0 – 50% FL = **unaffected**
- “ >50-100% FL **and/or** < 25% LA = **affected (mild)**
- “ 25-50% LA = **affected (moderate)**
- “ > 50% LA = **affected (severe)**

Grading of iridocorneal angle width (ICAwidth):



Ratio A/B:

PL not visible

$A < 1/3$ of B

$A \geq 1/3$ of B

Terminology:

closed

narrow

open

affected (severe)

affected (moderate)

normal

Presented (2017) & revised (2022) by
Marianne Richter

ECVO Certificate

In the area above for descriptive comments, the examiner specifies the type of ICA abnormality: PLA (pectinate ligament abnormality and/or ICA (iridocorneal angle) width



Descriptive comments:

.....

Eye disease no. severe

15. Cataract other:

- punctata
- suture line tip
- suture line
- nuclear ring
- nuclear fibreglass/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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> mild <input checked="" type="checkbox"/> moderate <input checked="" 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

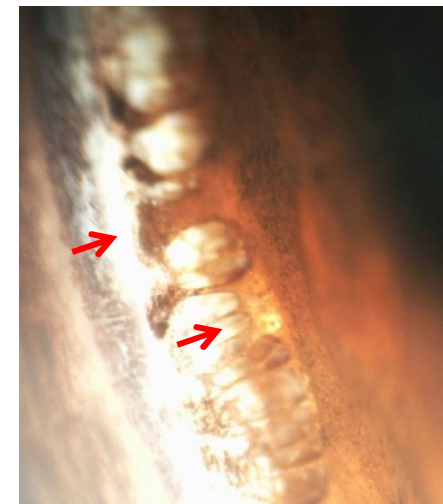
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Advantage: the examiner clearly indicates the severity of ICA abnormality in its entirety and its clinical impact; comprehensible to the breeder

FO

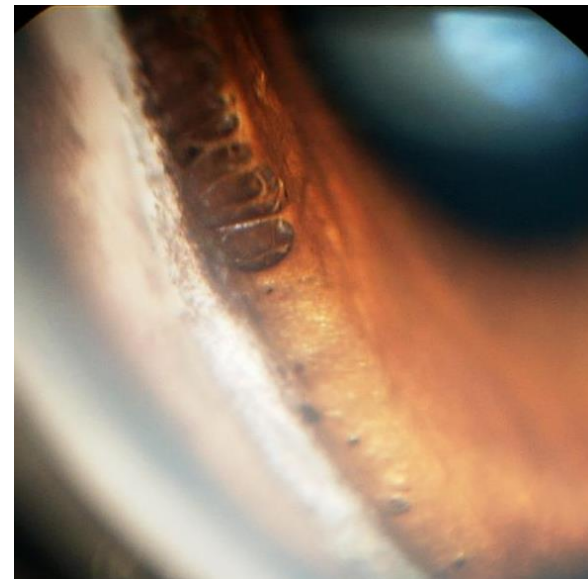
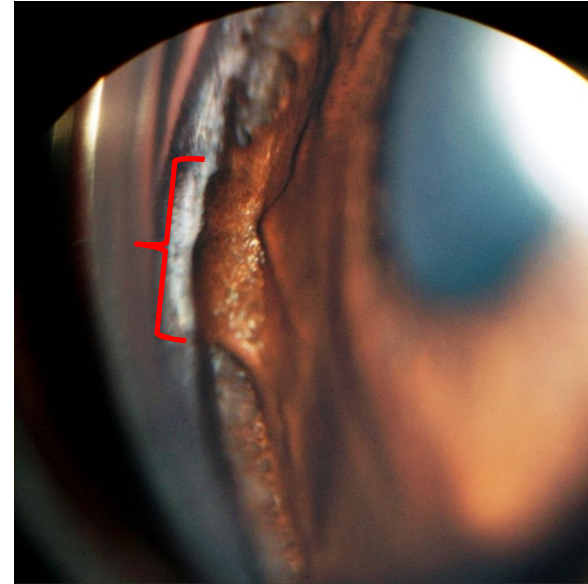
Definitions:

- “ **Normal PL:** thin/filamentous fibres from iris base to its insertion at the cornea
- “ **Fibrae latae (FL) :** fibres with a confluent (broad) base and shortened thin insertions at the cornea or thick fibres (<5 fibres)



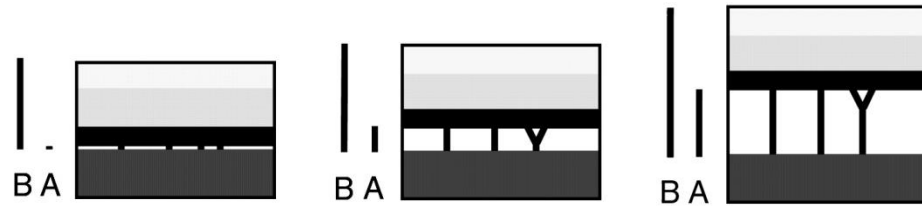
Definitions:

- “ **Laminae (LA):** plates or sheets of continuous tissue (>5 fibres), with or without flow holes

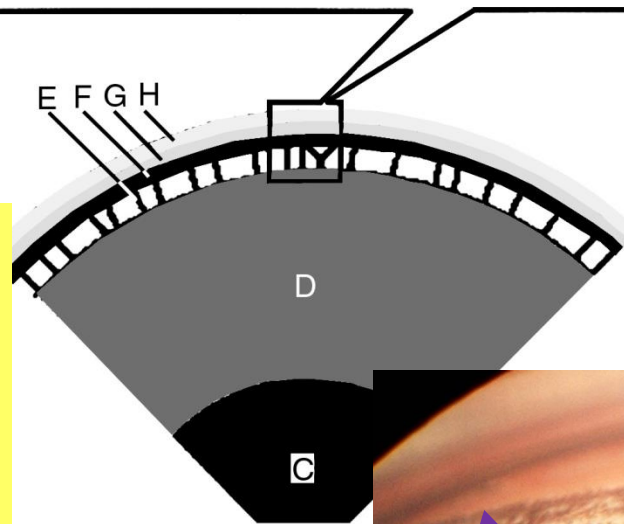


Definitions:

“ iridocorneal angle width (ICAwidth):



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B



Comparison between 2 distances:

A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea at the transection area

C = Pupil

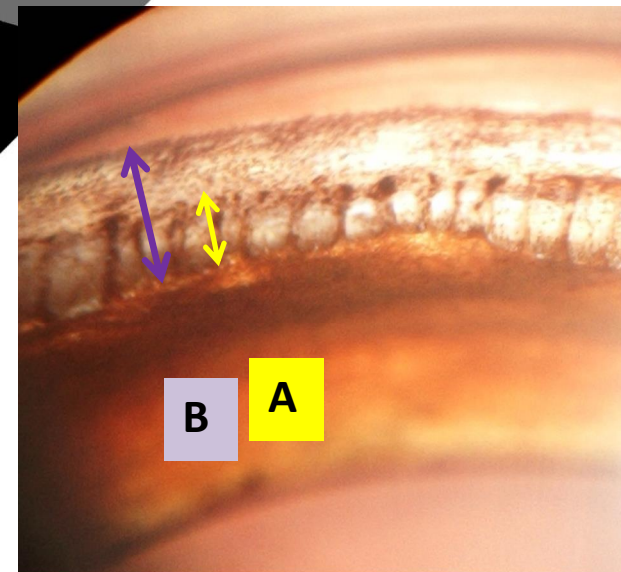
D = Iris

E = PL

F = inner/deep pigment band

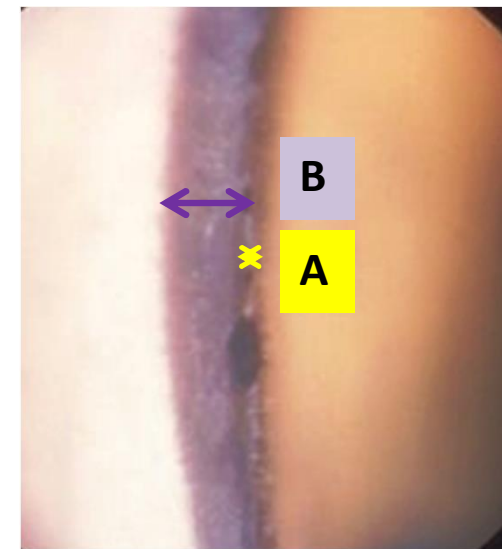
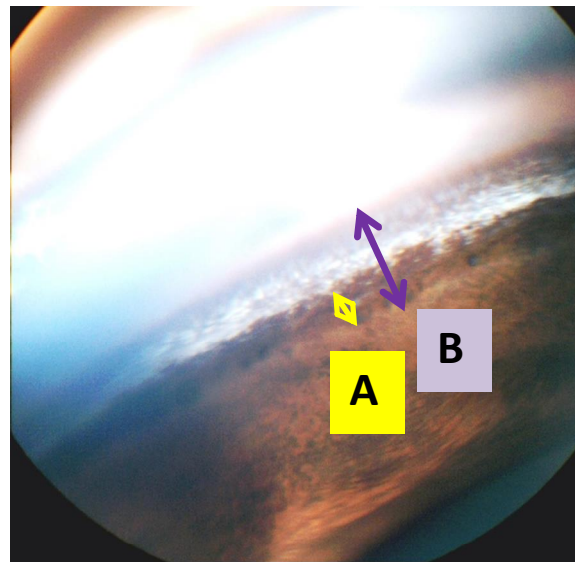
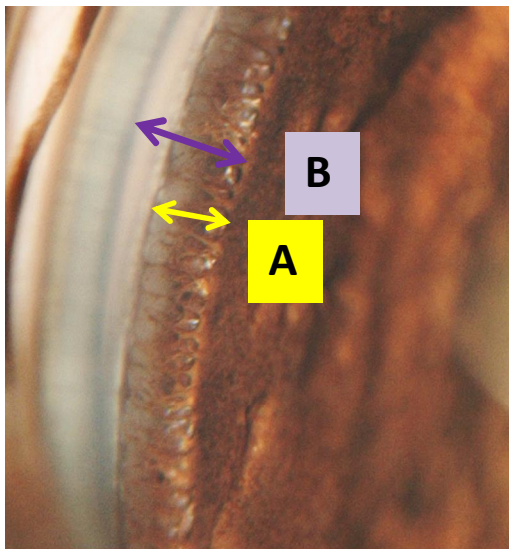
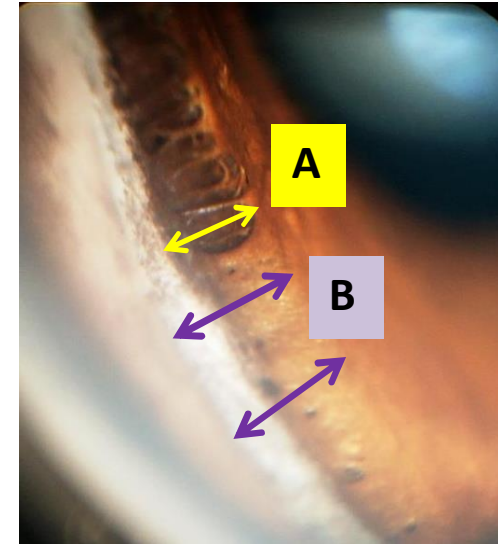
G = outer/superficial pigment band

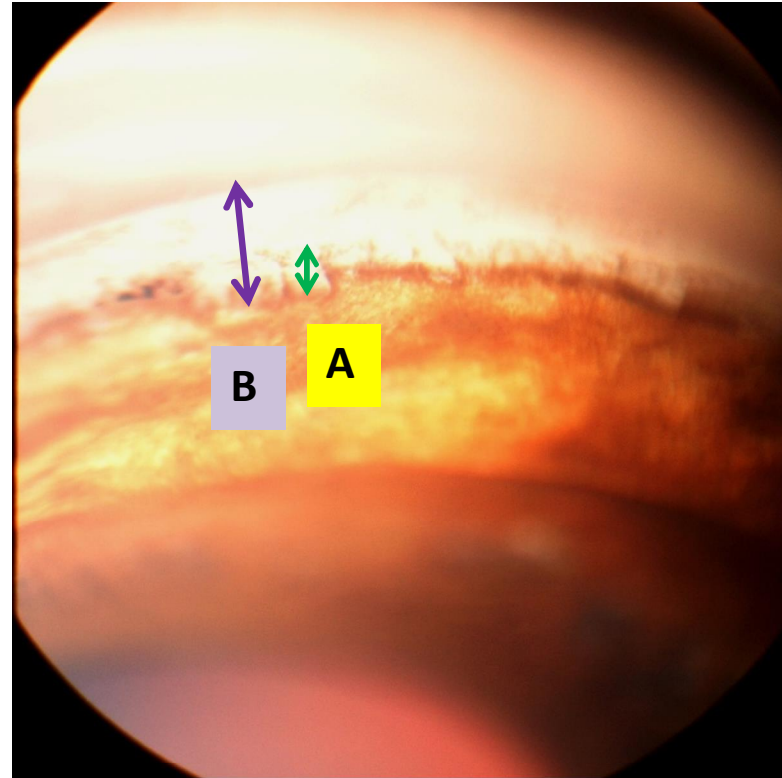
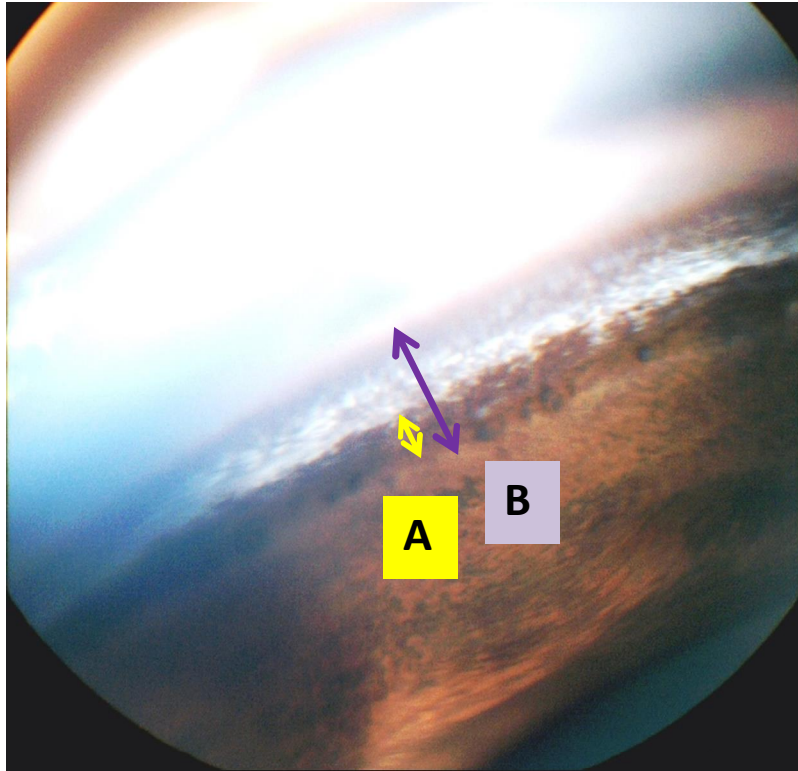
H = corneal transection



Definitions:

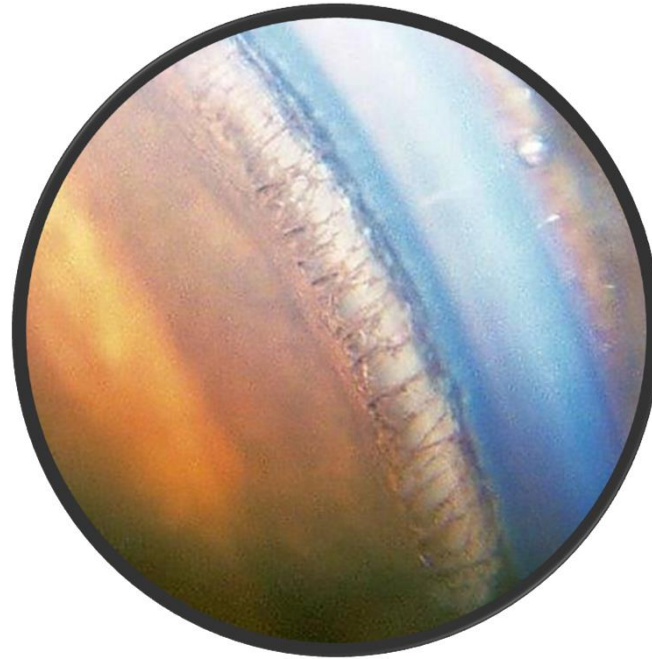
” iridocorneal angle width (ICAwidth):
open – narrow – closed



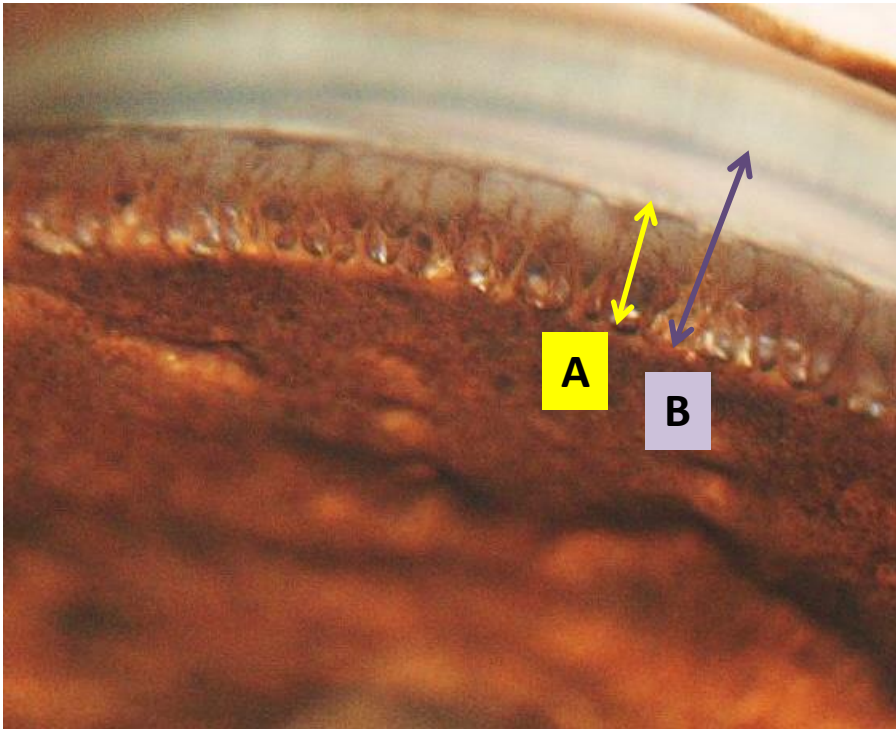


Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

Examples



In the following example images, it is assumed that the image section is representative of 360 degrees of the iridocorneal angle



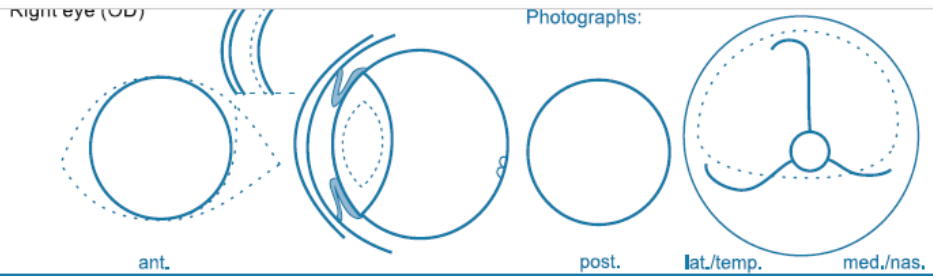
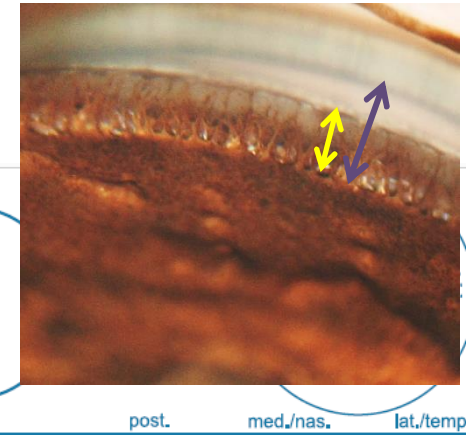
PLA: 0-50% FL around 360° = **unaffected**
ICAW: open

A = length of PL
 B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 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 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"/>

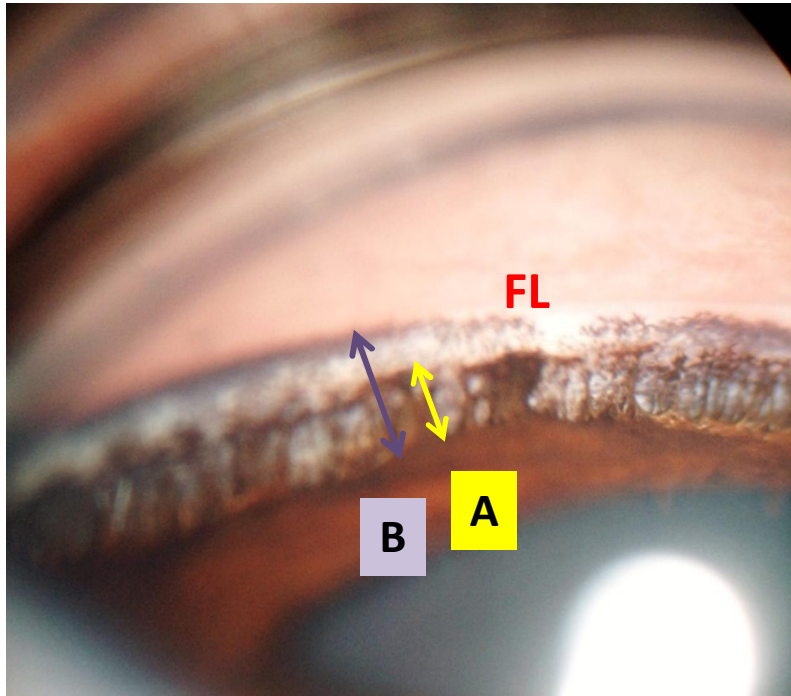
Interpretation

- * "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 inmonths.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



PLA: 0-50% FL around 360° = **unaffected**
ICAW: open

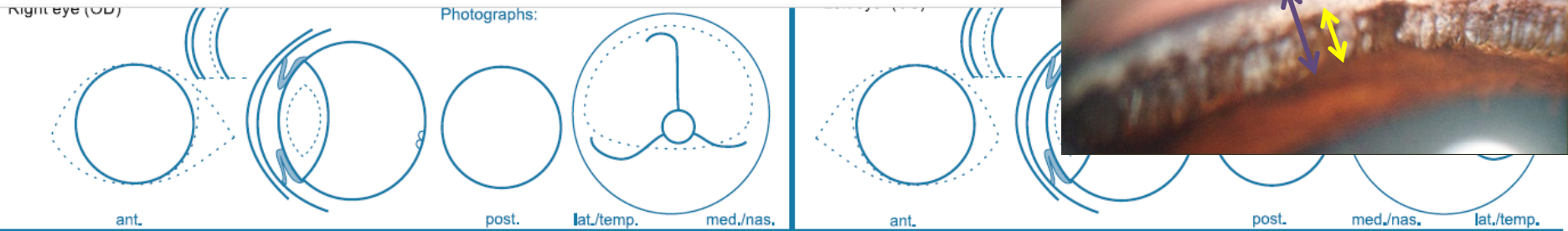
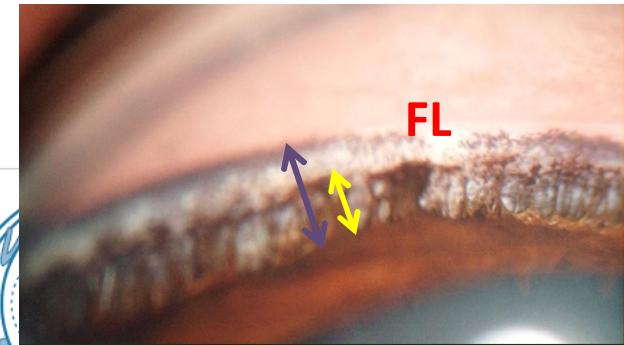
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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:	<input 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 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"/>

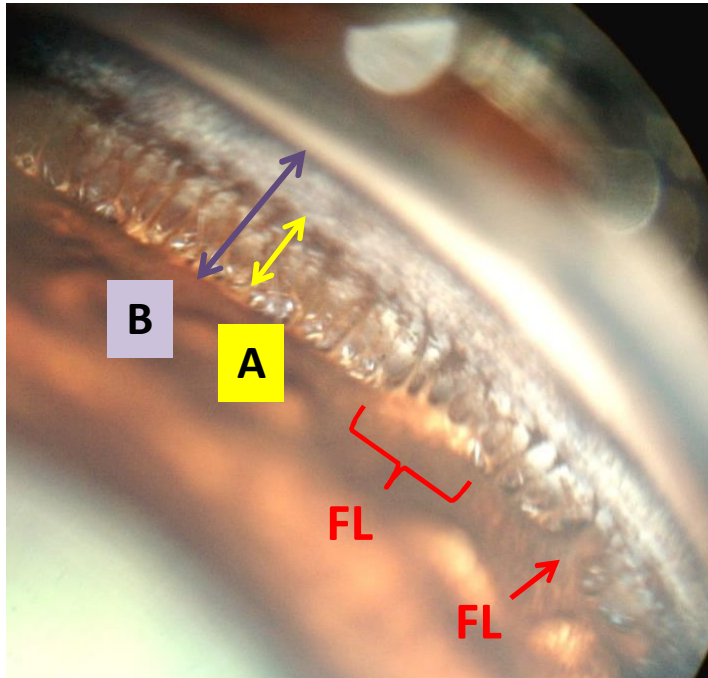
Interpretation

- * "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 inmonths.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



PLA: 0-50% FL around 360° = **unaffected**
ICAW: open

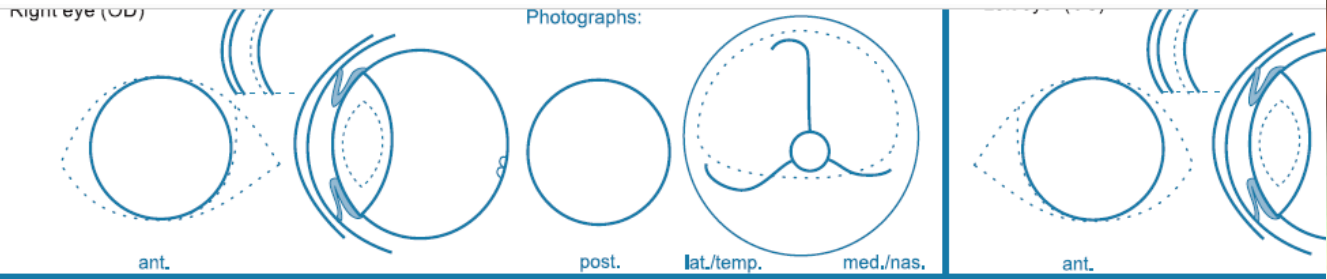
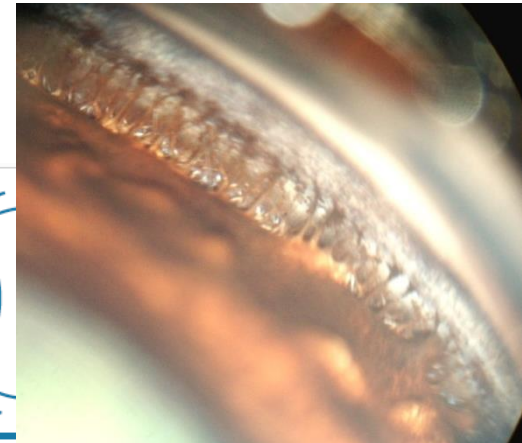
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> mild <input type="checkbox"/> moderate <input type="checkbox"/> severe

Results valid for 12 months

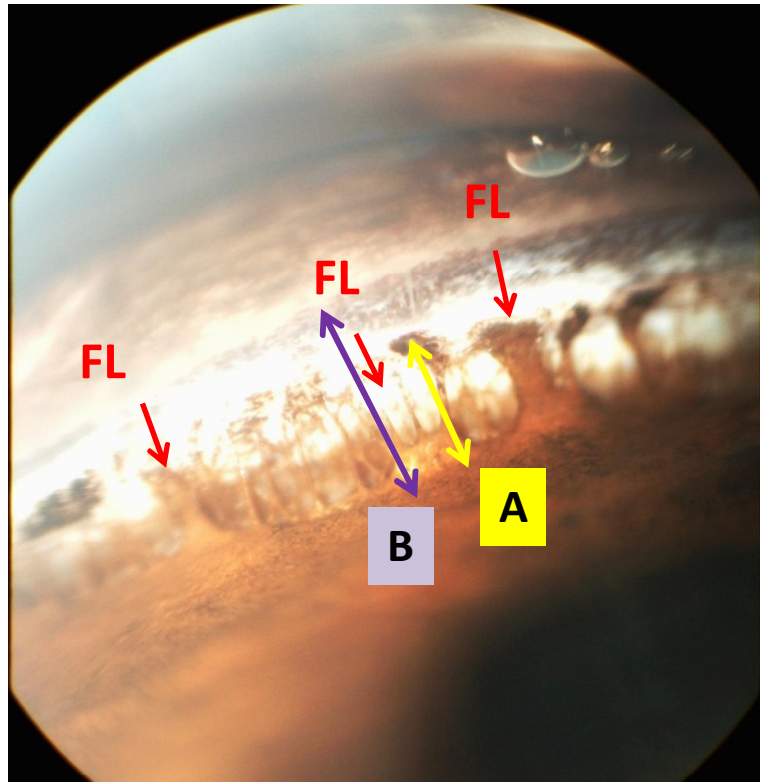
	* UNAFFECTED	*** SUSPICIOUS	* AFFECTED
11. Entropion / Trichiasis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macropblepharon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Distichiasis / Ectopic cilia	<input type="checkbox"/>	<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.
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FOR FUTHER INFORMATION: P.T.O. Examiner

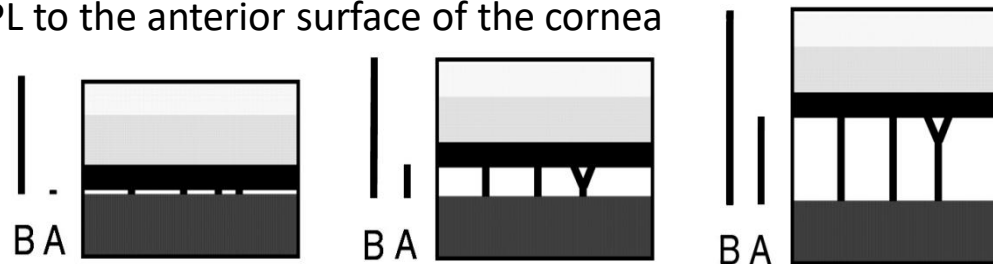
Presented (2017) & revised (2022) by Marianne Richter



PLA: 0-50% FL around 360° = **unaffected**
ICAW: open

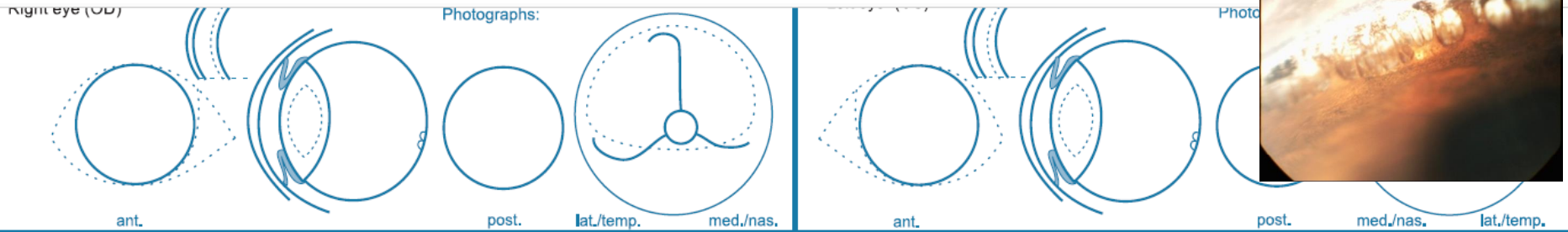
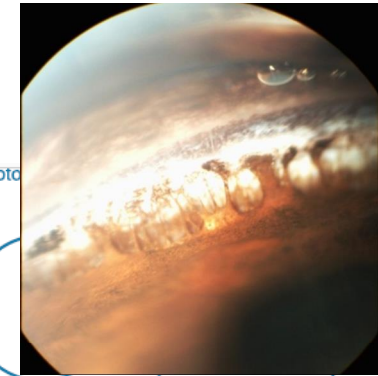
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 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 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.

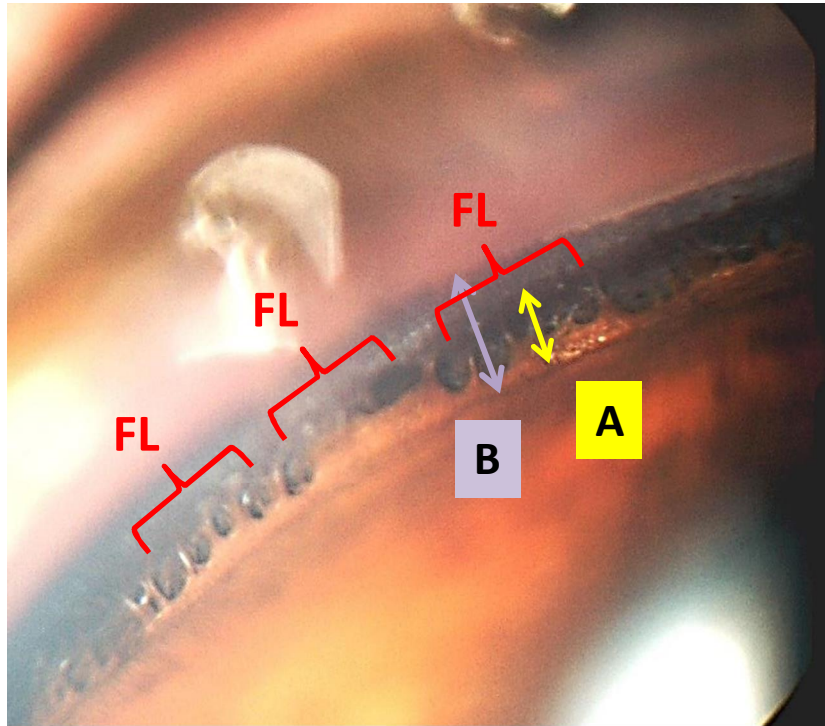
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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

FOR FUTURE INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



PLA: >50-100% FL **and/or** <25% LA
 = **affected – mild**
ICAW: open

A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

ECVO Certificate



Right eye (OD) Photographs:

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

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

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 checked="" 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"/>

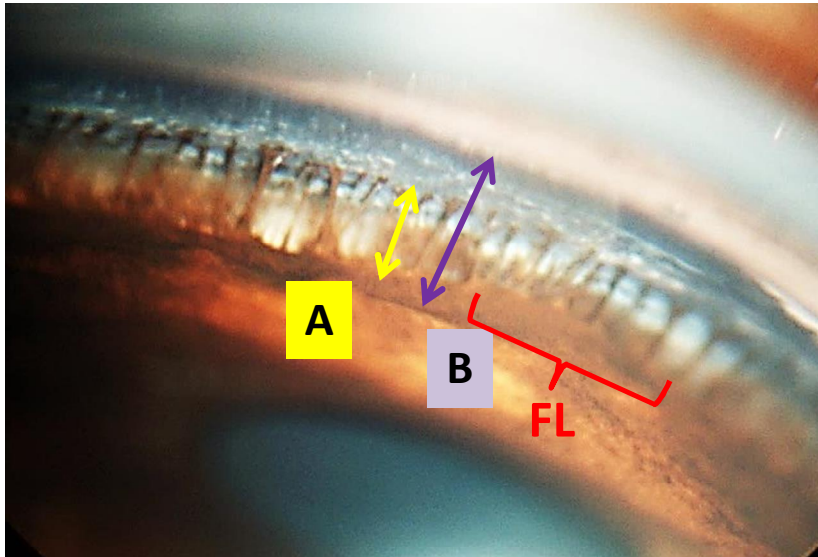
Interpretation

- * "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 inmonths.

FOR FUTURE INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
 Marianne Richter



PLA: 0-50% FL around 360° = **unaffected**
ICAW: open

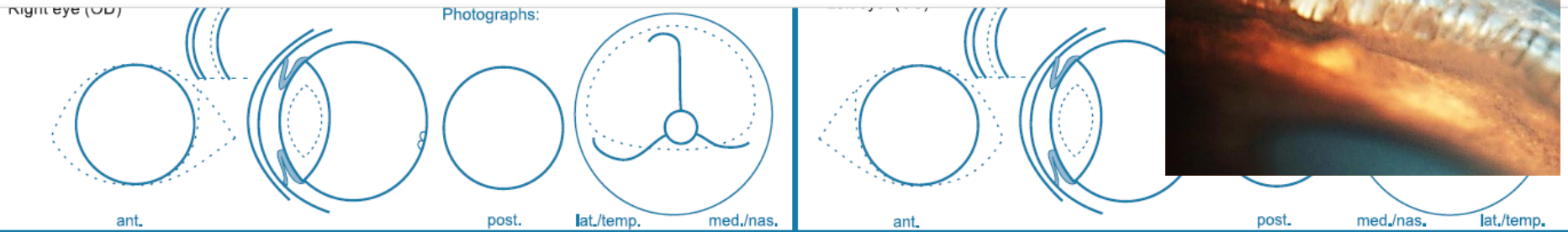
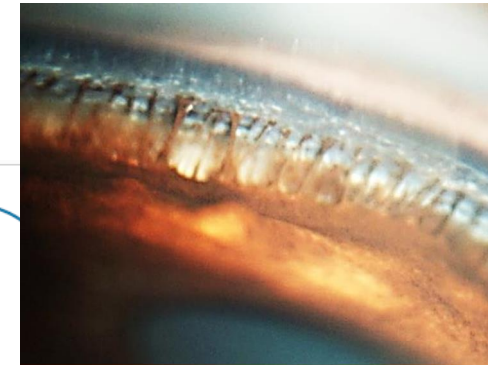
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 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 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.

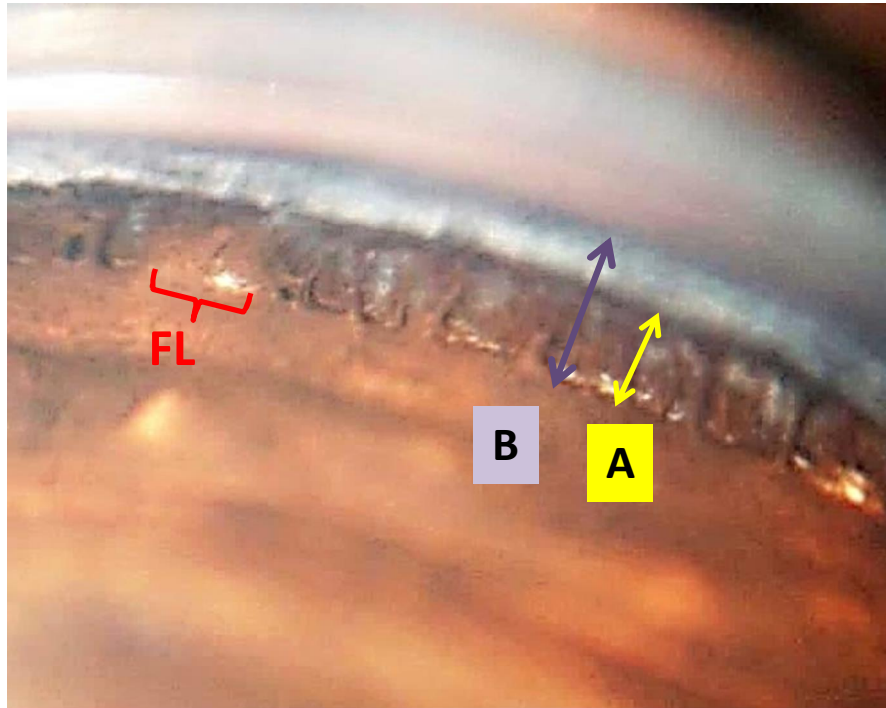
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



PLA: 0-50% FL around 360° = **unaffected**
ICAW: open

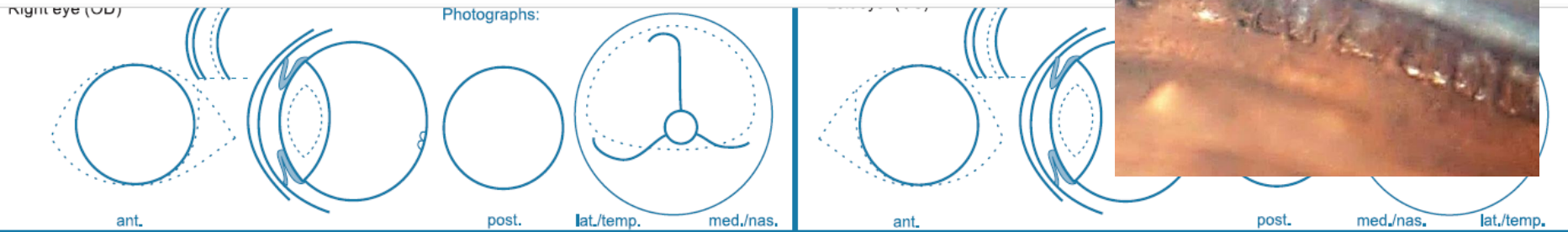
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 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 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.

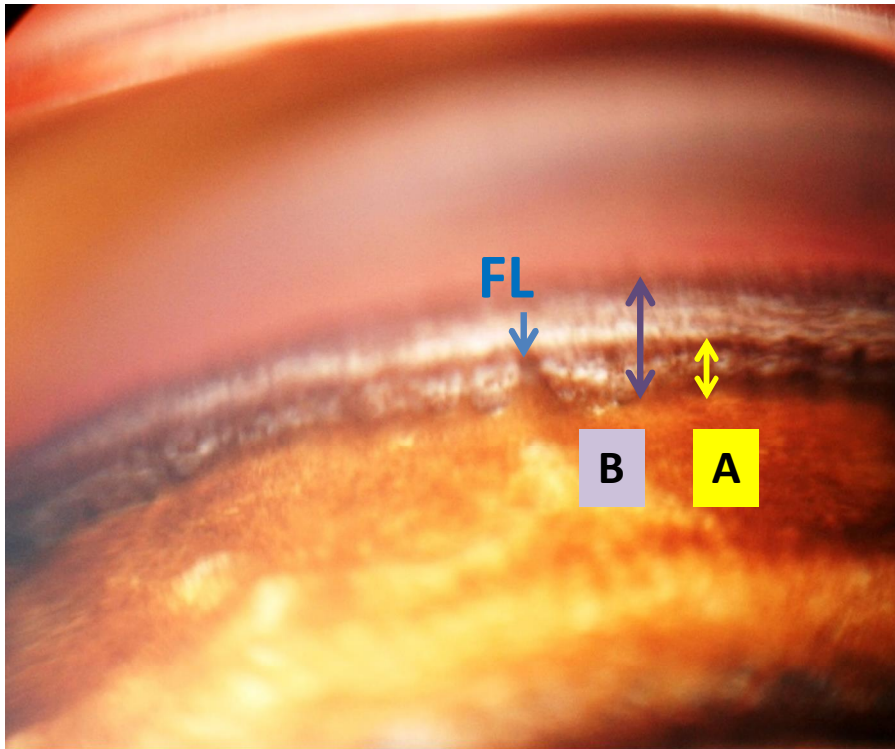
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



PLA: 0-50% FL around 360° = **unaffected**

ICAW: narrow = **affected – moderate?**
or

ICAW: open = **unaffected?**

Comment: if the ICAW appears narrow, the position of the gonio lens must be checked and, if necessary, moved with a finger until the iridocorneal angle can be viewed and judged clearly.

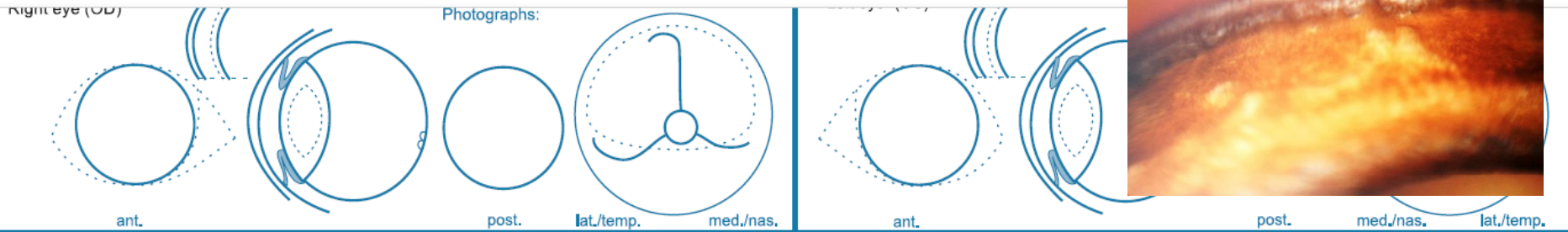
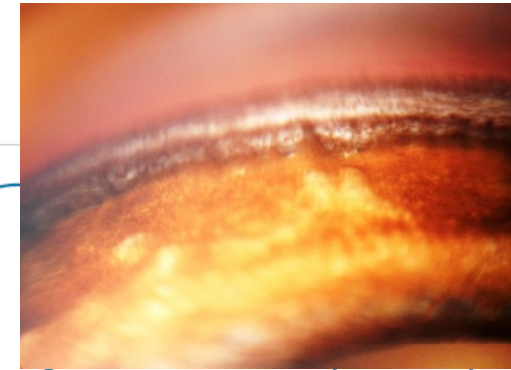
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ectropion / Macrolabopharon	<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.

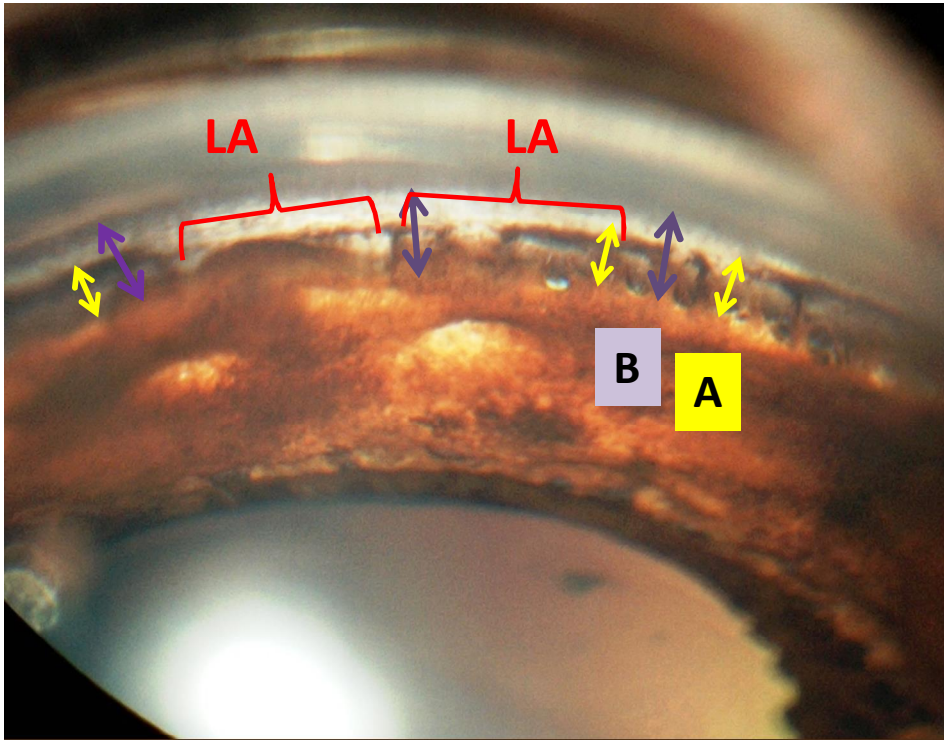
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



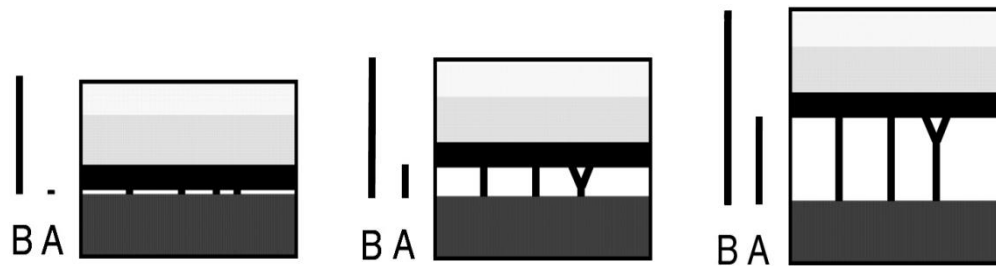
PLA: 25-50% LA (around 360°) =
affected – moderate

ICAW: open

Comment: in areas of LA the ICAwidth may be narrow... however, the ICAwidth is judged over 360 degrees!

A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:

Ratio A/B:

closed

PL not visible

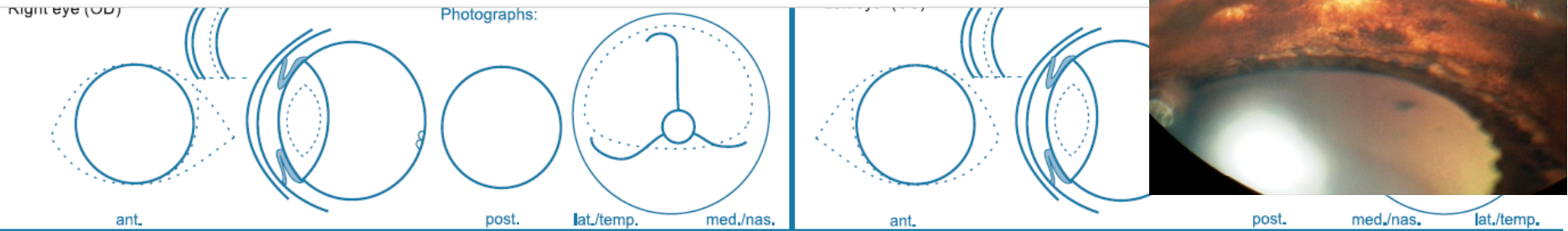
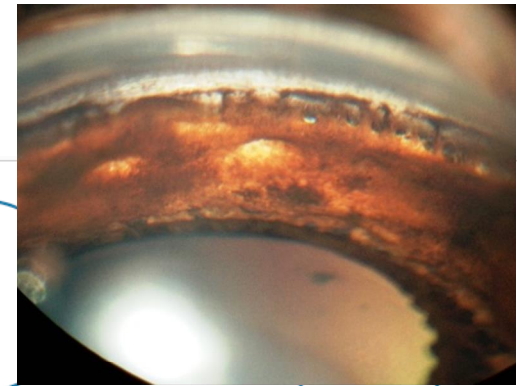
narrow

$A < 1/3$ of B

open

$A \geq 1/3$ of B

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 checked="" type="checkbox"/> mild <input checked="" 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"/>

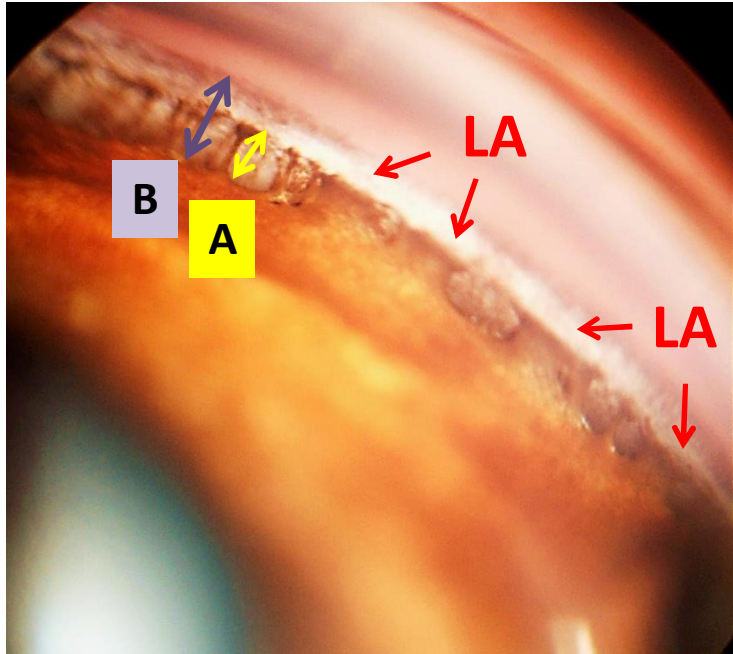
Interpretation

- * "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 inmonths.

FOR FUTURE INFORMATION: P.T.O.

Examiner

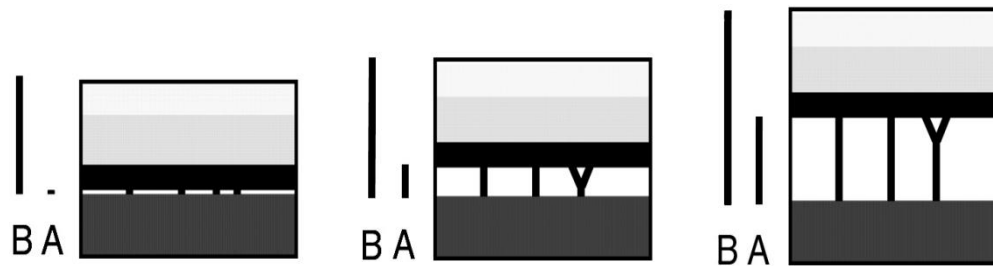
Presented (2017) & revised (2022) by
Marianne Richter



PLA: 25-50% LA (around 360°) =
affected – moderate
 ICAW: open

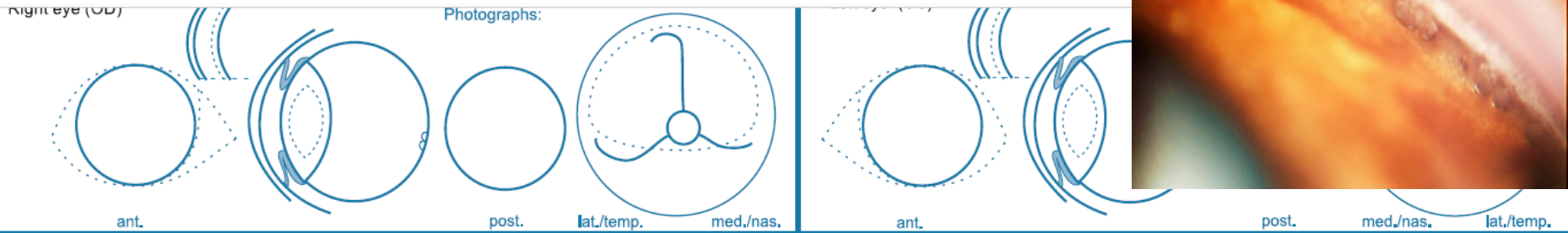
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 checked="" type="checkbox"/> mild <input checked="" 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"/>

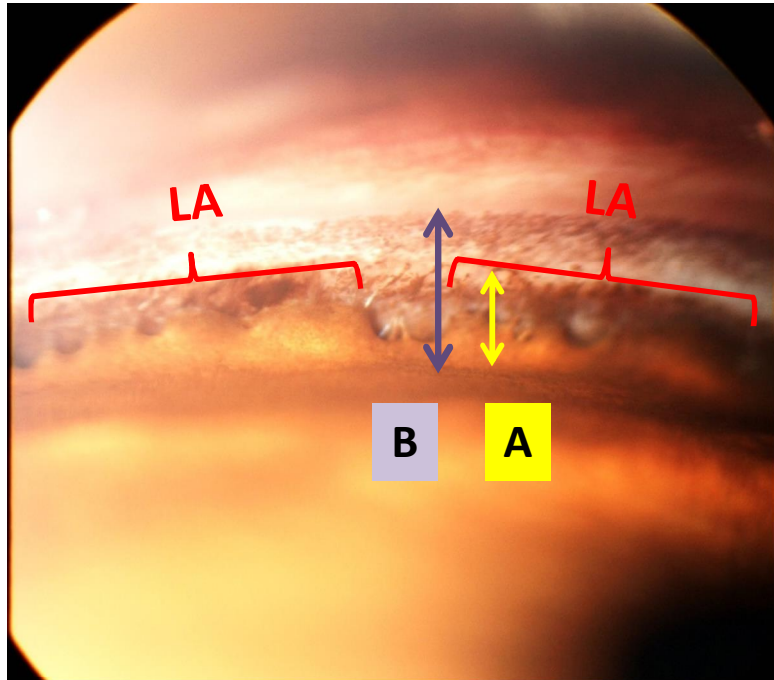
Interpretation

- * "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 inmonths.

FOR FUTURE INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



PLA: >50% LA (around 360°) = **affected**
 – **severe**
ICAW: open

A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:

Ratio A/B:

closed

PL not visible

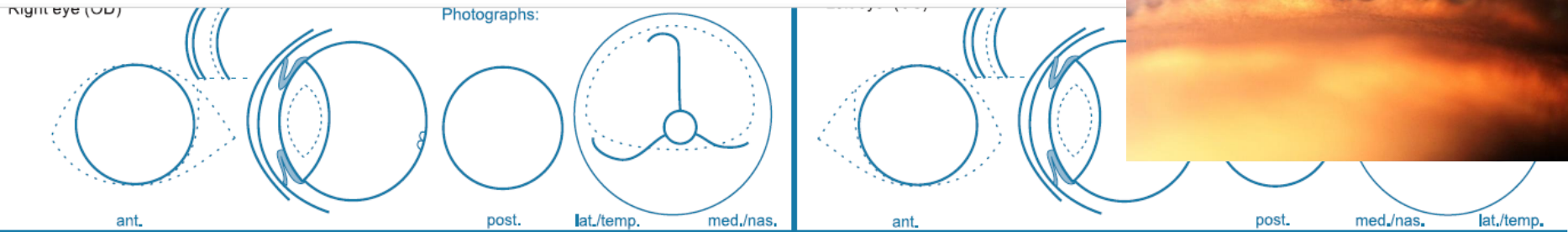
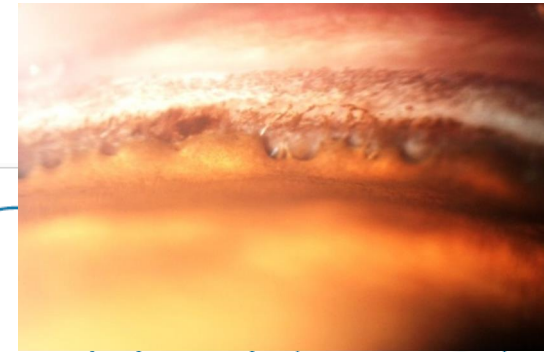
narrow

$A < 1/3$ of B

open

$A \geq 1/3$ of B

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 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> mild <input checked="" type="checkbox"/> moderate <input checked="" 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 / Macropblepharon	<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 checked="" 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 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"/>

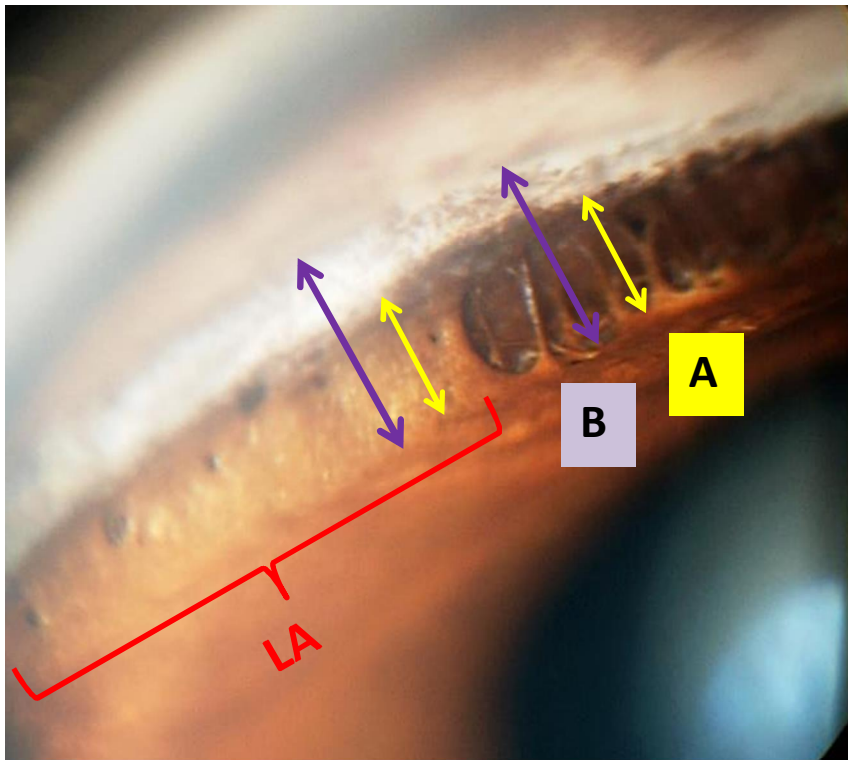
Interpretation

- * "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 inmonths.

FOR FUTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



PLA: > 50% LA (around 360°) =
affected – severe

ICAW: open

Comment: ICAwidth = open but
 occluded by LA (note the difference
 between the terms “closed” and
 “occluded”);

A = length of PL

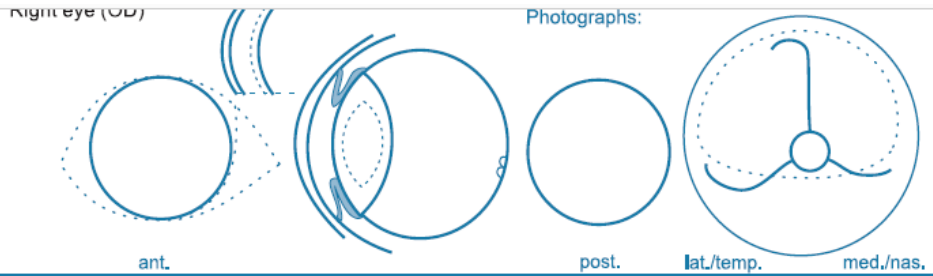
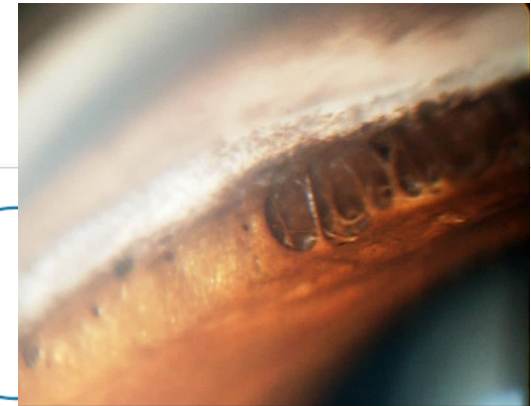
B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

Presented (2017) & revised (2022) by
 Marianne Richter

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 checked="" type="checkbox"/> mild <input checked="" type="checkbox"/> moderate <input checked="" 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.

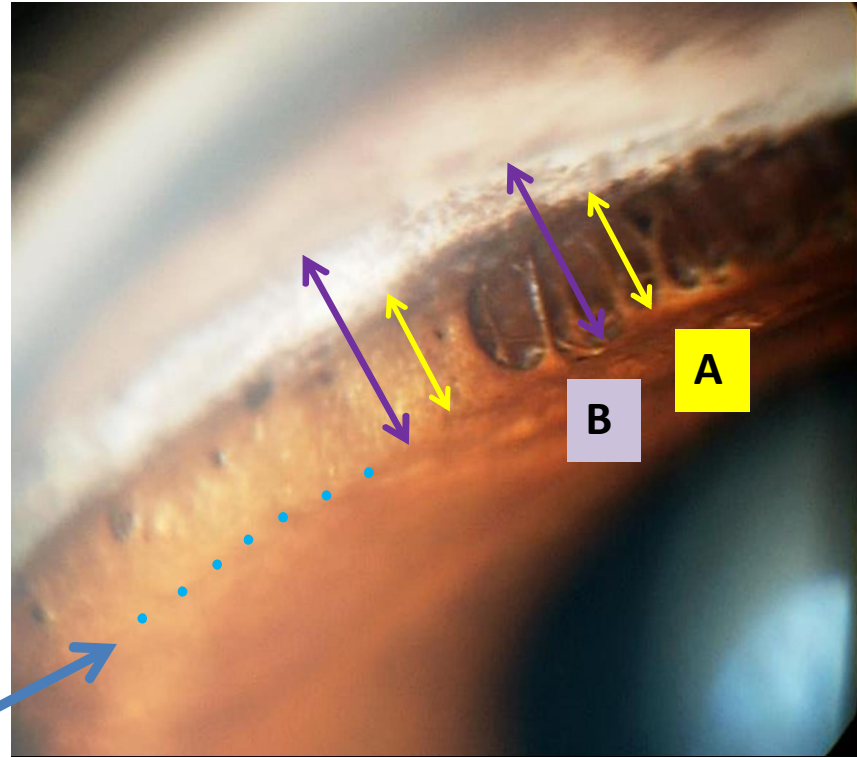
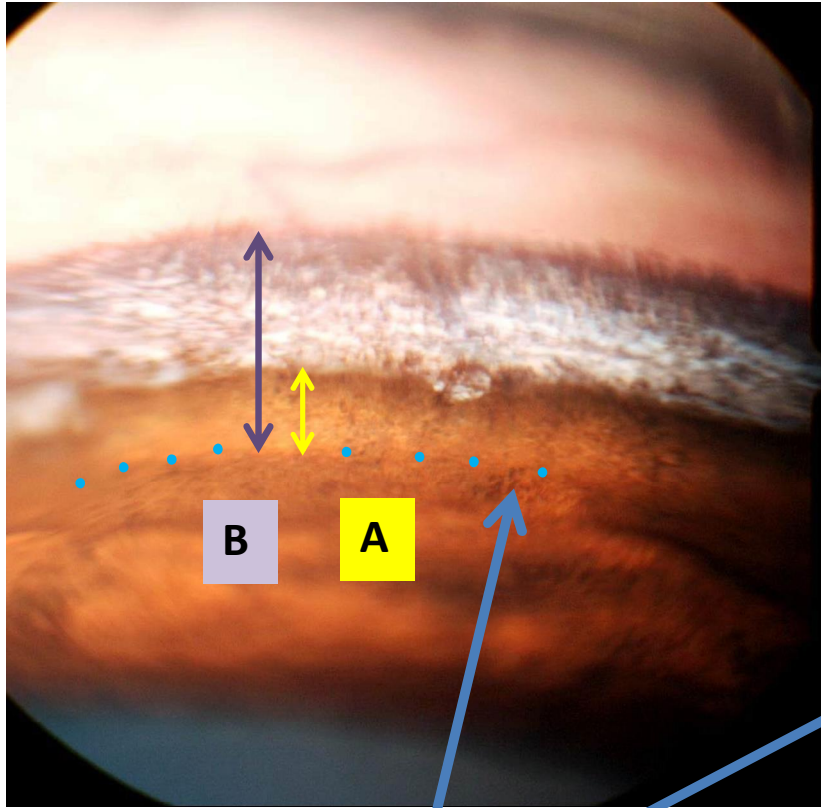
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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

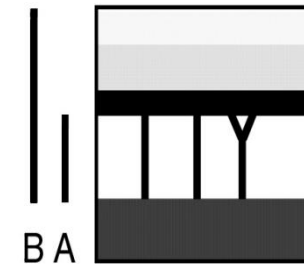
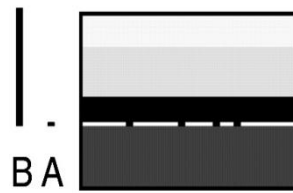
FOR FUTHER INFORMATION: P.T.O.

Examiner

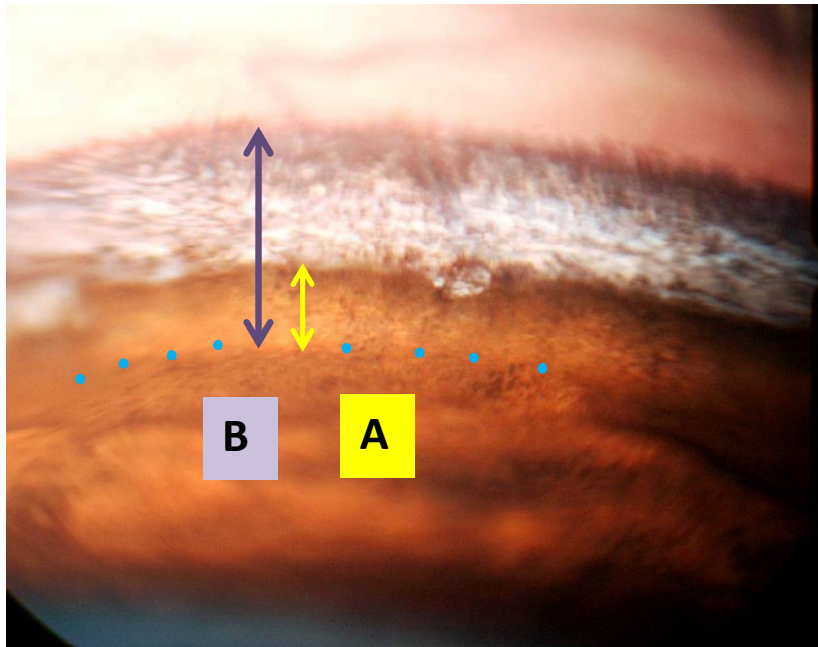
Presented (2017) & revised (2022) by
 Marianne Richter



Base of the iris



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B



PLA: > 50% LA (around 360°) =
affected – severe

ICAW: open

Authors interpretation: ICA occluded by a sheet of pigmented tissue spanning the angle from the base of the iris to the inner-pigmented band with one flow hole visible (>90% affected).

“Progression of pectinate ligament dysplasia over time in two populations of Flat-Coated Retrievers” R.Pearl, D.Gould, B.Spiess
Veterinary Ophthalmology, Vol18, Issue 1, p 6-12, Sep 2013

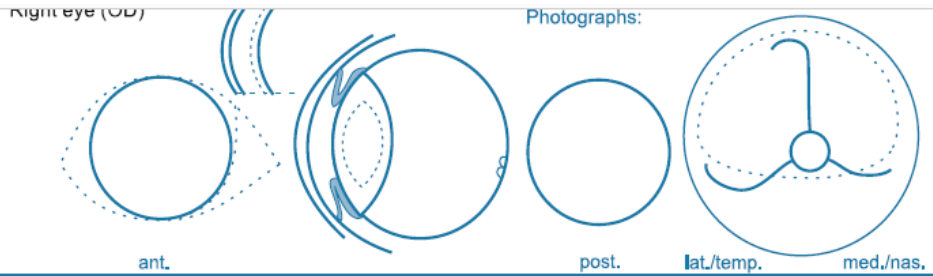
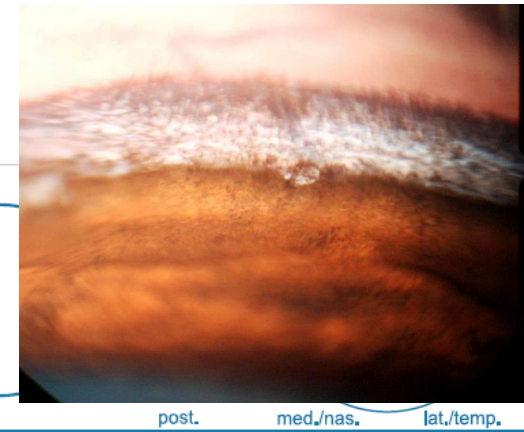
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 checked="" type="checkbox"/> mild <input checked="" type="checkbox"/> moderate <input checked="" 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"/>

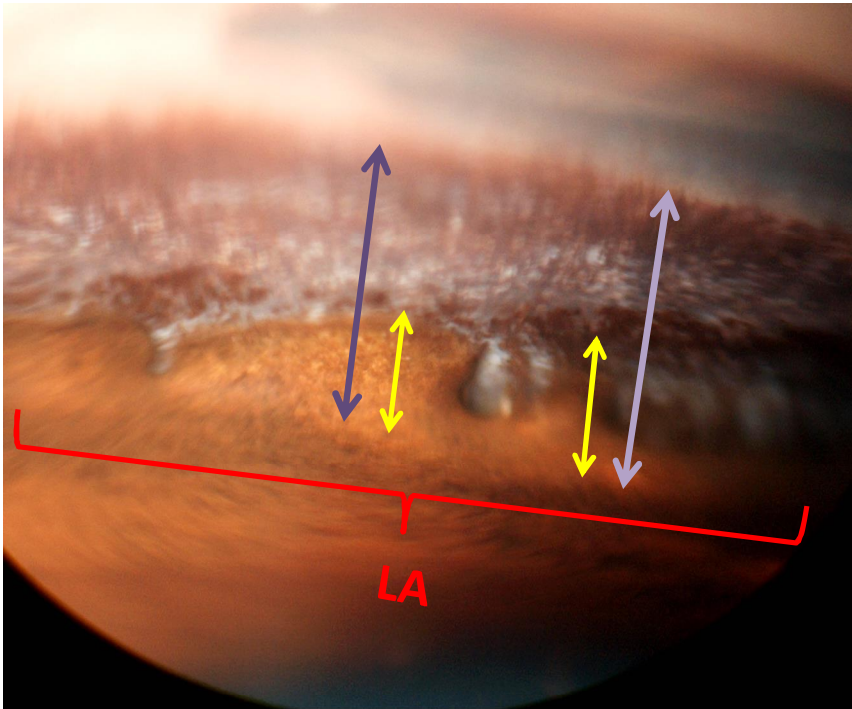
Interpretation

- * "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 inmonths.

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
 Marianne Richter



PLA: > 50% LA (around 360°) =
affected – severe

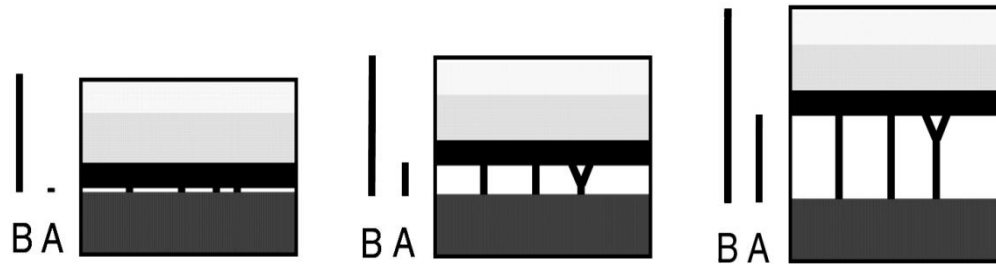
ICAW: open

Authors interpretation: ICA occluded by a sheet of pigmented tissue spanning the angle from the base of the iris to the inner-pigmented band with several flow holes visible (70% affected).

“Progression of pectinate ligament dysplasia over time in two populations of Flat-Coated Retrievers” R.Pearl, D.Gould, B.Spiess
Veterinary Ophthalmology, Vol18, Issue 1, p 6-12, Sep 2013

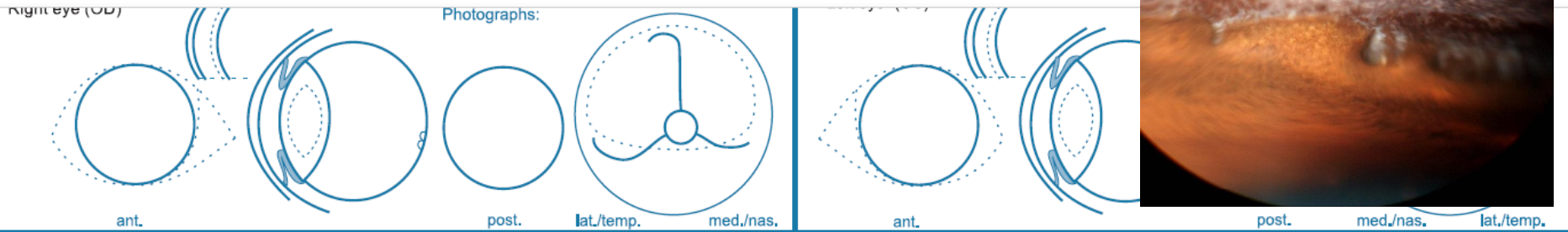
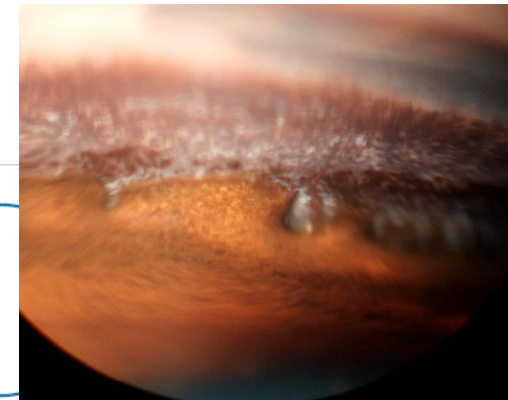
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 checked="" type="checkbox"/> mild <input checked="" type="checkbox"/> moderate <input checked="" 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.

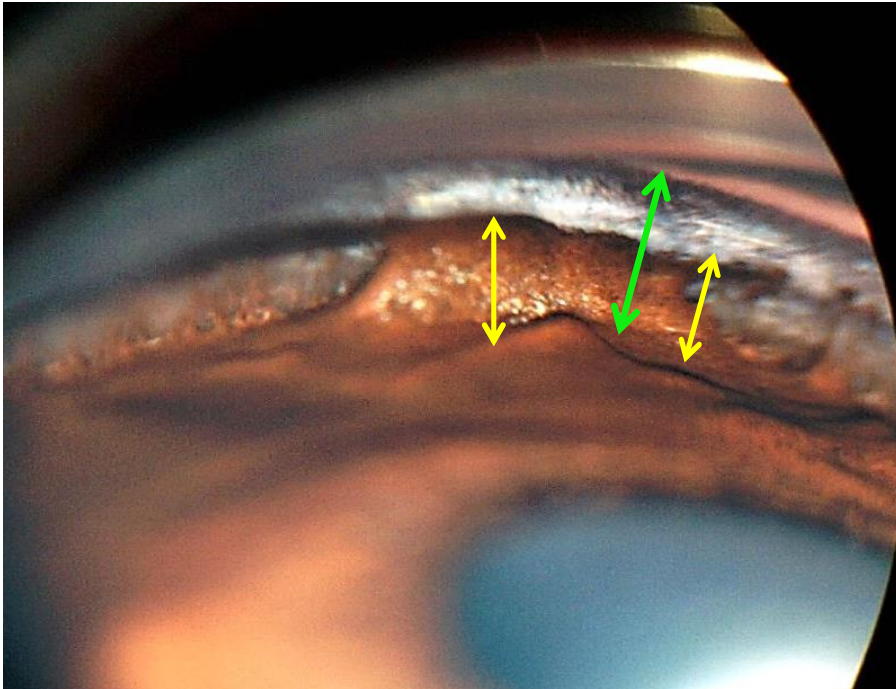
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
Marianne Richter



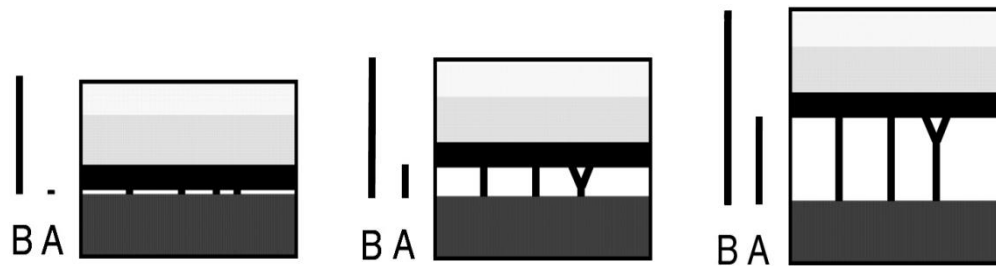
Gonioscopy: the slide shows a **single abnormal area**, the rest of the ICA looks normal.

PLA: >50-100% FL **and/or** < 25% LA = **affected – mild**

ICAW: open

A = length of PL

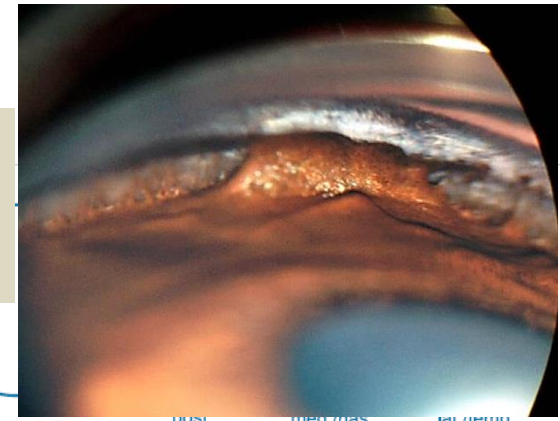
B = distance from the origin of the PL to the anterior surface of the cornea



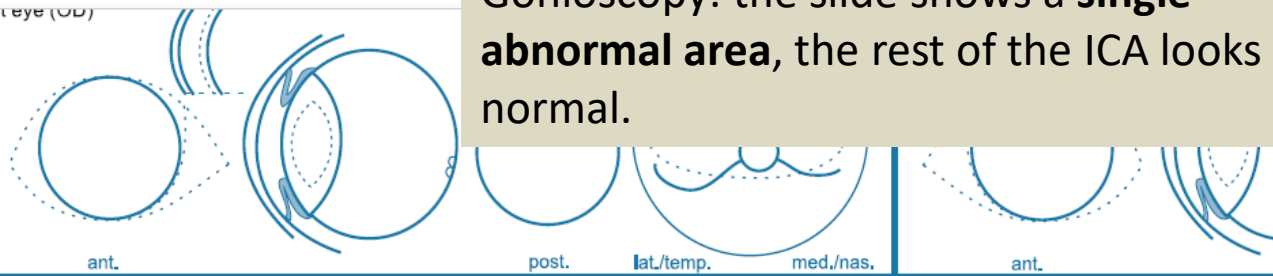
Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

ECVO Certificate

Gonioscopy: the slide shows a **single abnormal area**, the rest of the ICA looks normal.



Right eye (OD)



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 checked="" 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.

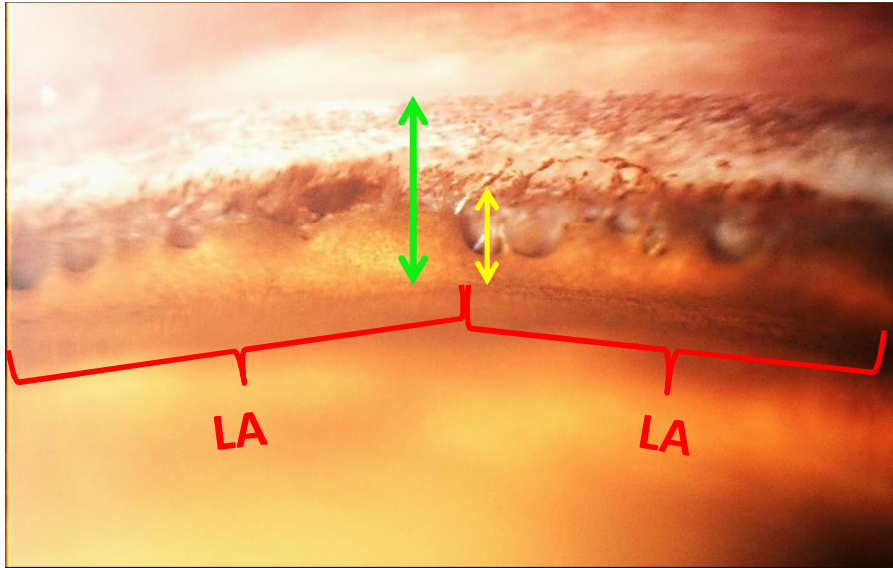
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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

FOR FURTHER INFORMATION: P.T.O.

Examiner

Presented (2017) & revised (2022) by
 Marianne Richter



PLA: > 50% LA = **affected – severe**
ICAW: open

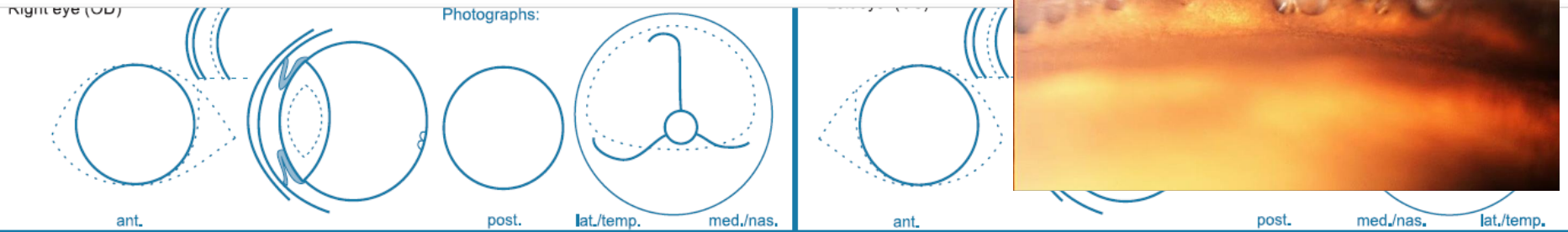
A = length of PL

B = distance from the origin of the PL to the anterior surface of the cornea



Terminology:	closed	narrow	open
Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

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 checked="" type="checkbox"/> mild <input checked="" type="checkbox"/> moderate <input checked="" 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"/>

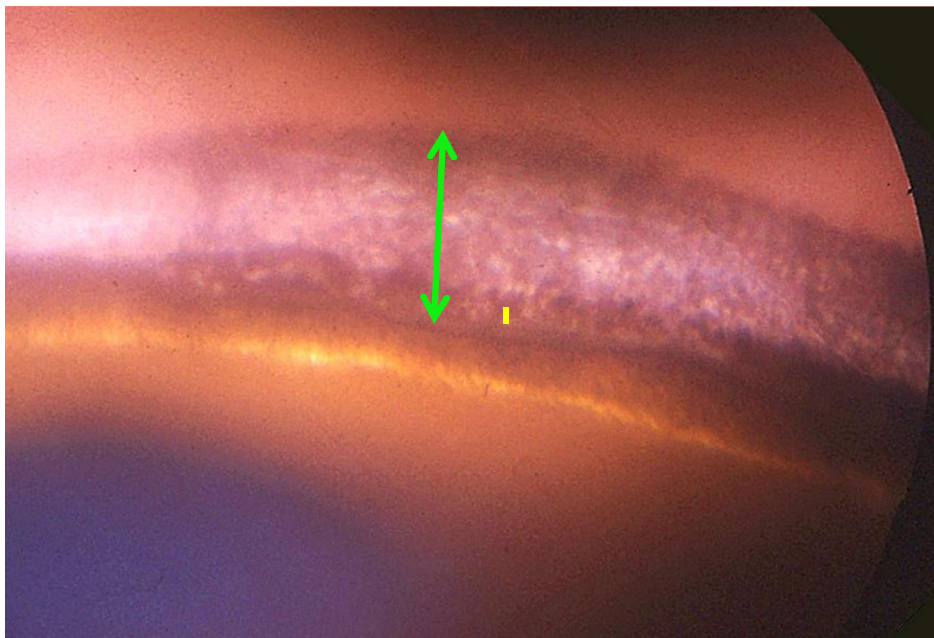
Interpretation

- * "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 inmonths.

FOR FURTHER INFORMATION: P.T.O.

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PLA: PL not visible
ICAW: PL not visible = closed =
affected – severe

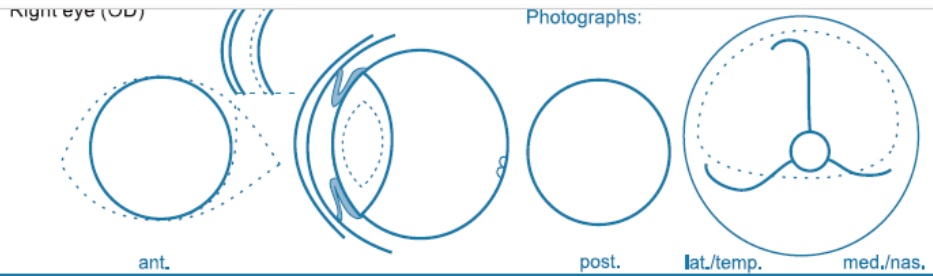
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Ratio A/B:	PL not visible	$A < 1/3$ of B	$A \geq 1/3$ of B

ECVO Certificate



Descriptive comments:

.....

.....

Eye disease no. severe

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- mild
 - moderate
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- ICA (width)
- narrow (moderate)
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4. Retinal Dysplasia (RD)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> (multi)focal <input type="checkbox"/> geographical <input type="checkbox"/> total
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6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:
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Results valid for 12 months

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14. Corneal dystrophy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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18. Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interpretation

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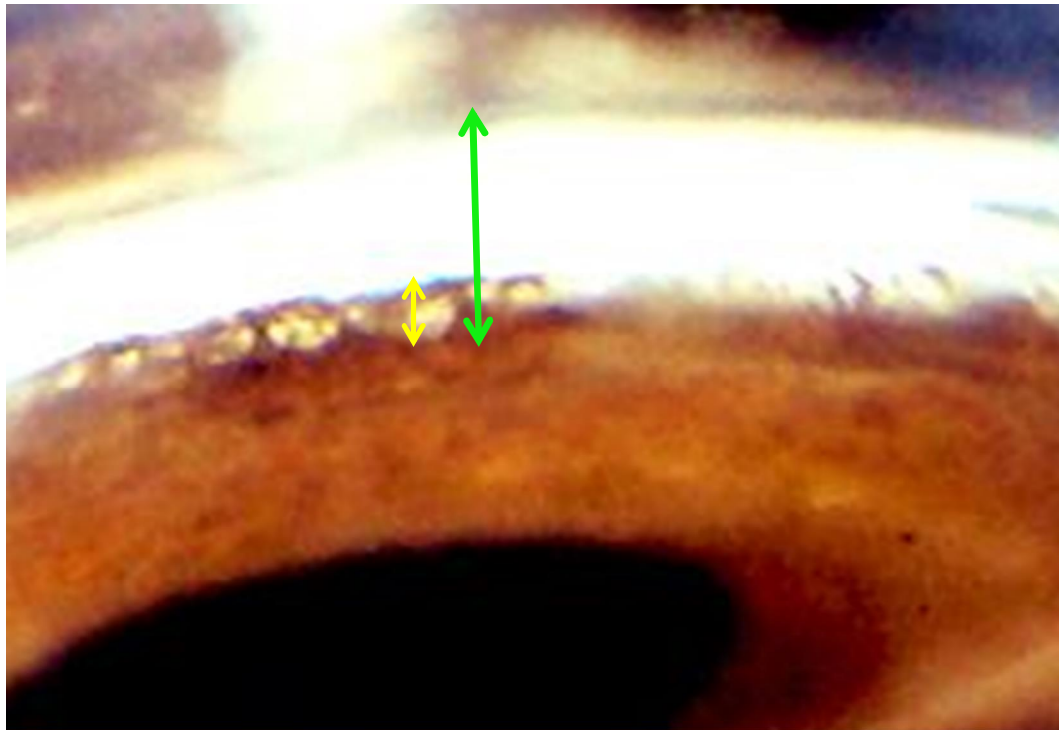
** The animal displays clinical features that could possibly fit the KP-HED mentioned, but the changes are inconclusive.

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FOR FURTHER INFORMATION: P.T.O.

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PLA: 0 – 50% FL = **unaffected**
ICAW: narrow = **affected – moderate**

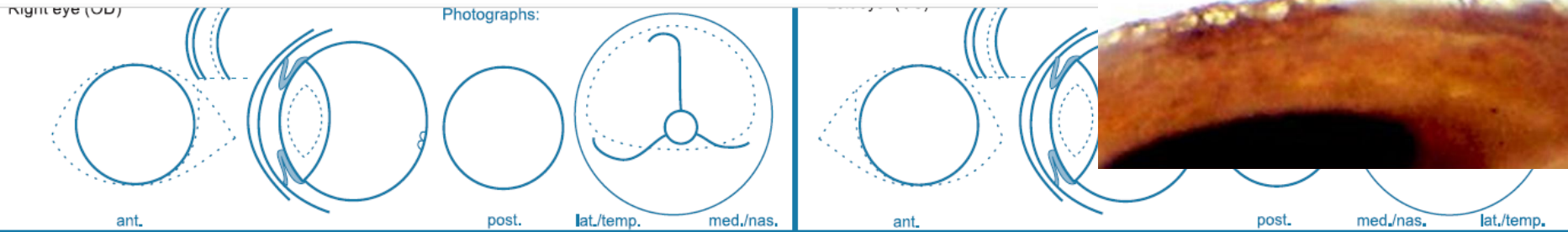
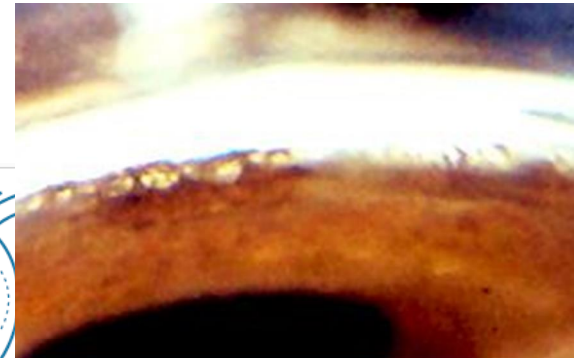
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ECVO Certificate



Descriptive comments:

Eye disease no. severe

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 suture line tip
 suture line
 nuclear ring
 nuclear fiberglass/pulverulent
8. ICAA: PLA mild
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 severe
ICA (width) narrow (moderate)
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6. Collie Eye Anomaly (CEA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> choroid, hypoplasia <input type="checkbox"/> coloboma <input type="checkbox"/> other:
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	UNAFFECTED *	SUSPICIOUS ***	AFFECTED *
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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
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FOR FUTHER INFORMATION: P.T.O. Examiner

Presented (2017) & revised (2022) by Marianne Richter

Chapter 8 Vet Advice:

- “ **Gonioscopy every 3 years /at age 1, 4 & 7** (Chapter 7 Recommendations regarding age and frequency)
- “ **Breeding advice** (ICA = iridocorneal angle abnormality):
 - . **Mild-moderate: OPTIONAL** (according to present scientific information available: if these dogs are used, it is recommended to breed these dogs to unaffected graded dogs)
 - . **Severe: NO BREEDING** (+ risk to develop glaucoma)