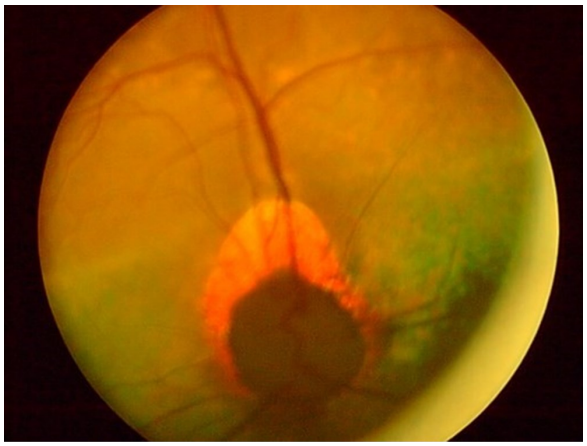
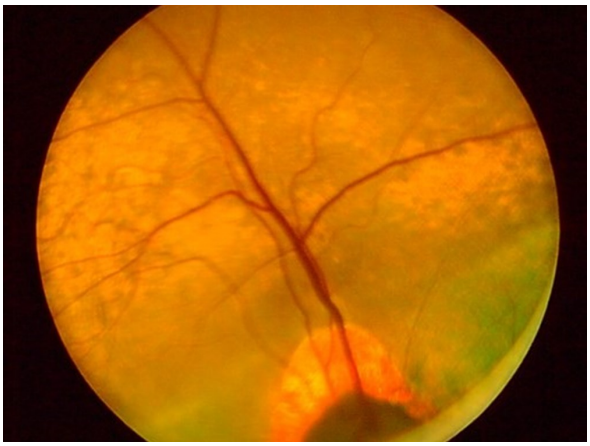
BASENJI

Retinopathy; primary retinal disease





Photos by courtesy of Kristina Narfström

Clinical description

Clinical signs of retinal disease are observed in affected dogs of both sexes when they are 4-6 years old by ophthalmoscopy 1). At this time visual problems are not apparent. Funduscopy shows a distinct, abnormally wide arcus, increasing in width with time to finally encircle the optic disc. With progression of disease also horizontal hyperreflective bands are observed on either side of the optic nerve head emerging from the hyperreflective and wide arcus. In some cases there is a grayish mottling especially in the tapetal fundus while nontapetal fundus is unremarkable. ERG in early cases have shown mainly normal responses but reduced amplitudes in more advanced disease. A few cases have progressed to generalized retinal atrophy with clinical similarities to classical PRA.

An inherited retinal degeneration in the breed, with similar appearance, was found to be associated with a mutation in S-antigen in a study by Goldstein et al 2). In their study this was described as a PRA. They also noted that not all Basenjis with retinal degeneration had the mutation, suggesting there could be more than one inherited retinal degeneration in the breed.

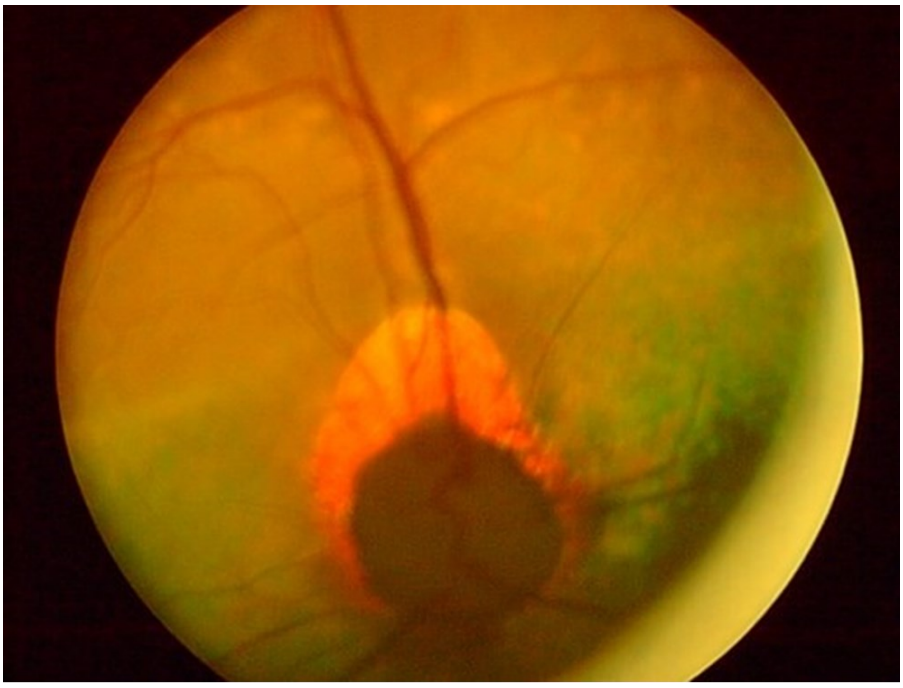
New data

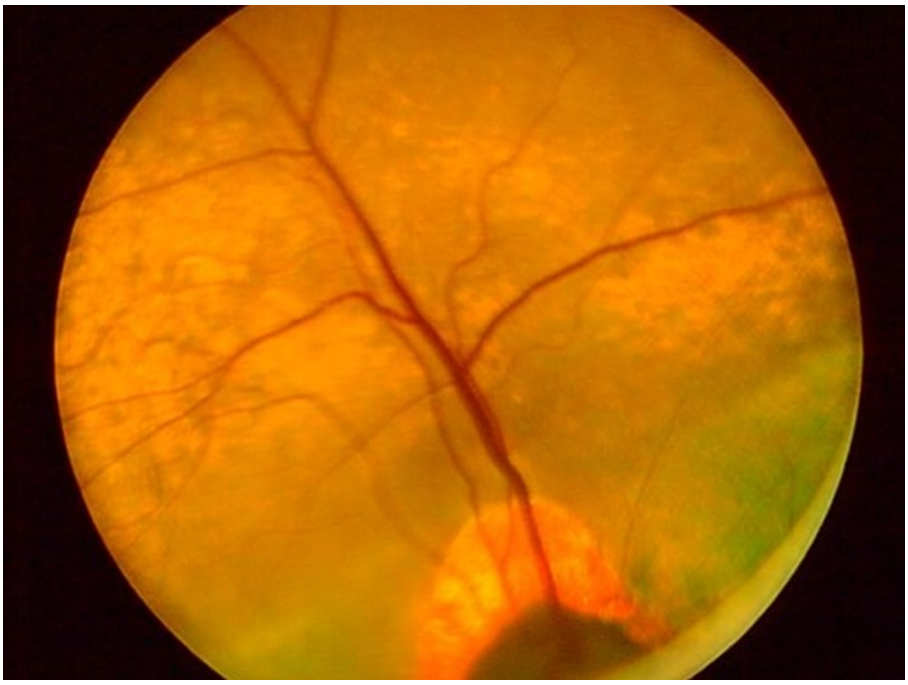
See Ch 8 for veterinary advice

New references

1. Narfström, K., Wallin-Håkansson, B., Hertil, E., Ekesten, B.: Familial retinopathy in Swedish Basenji dogs:
Clinical and electrophysiological findings. The First European Conference on Veterinary Visual Electrophysiology, Vienna, ECVO Abstract, 2000.

2. Orly Goldstein, Julie Ann Jordan, Gustavo D Aguirre, Gregory M Acland: A non-stop S-antigen gene mutation is associated with late onset hereditary retinal degeneration in dogs.
Mol Vis. 2013 Aug 27;19:1871-84.





LABRADOR RETRIEVER

Stargardt disease

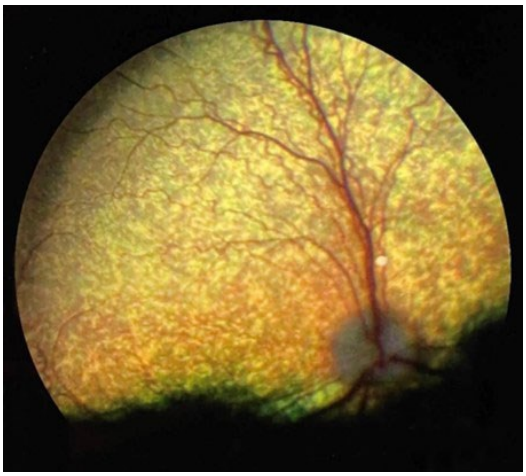


Photo by courtesy of Lena Karlstam

Clinical description

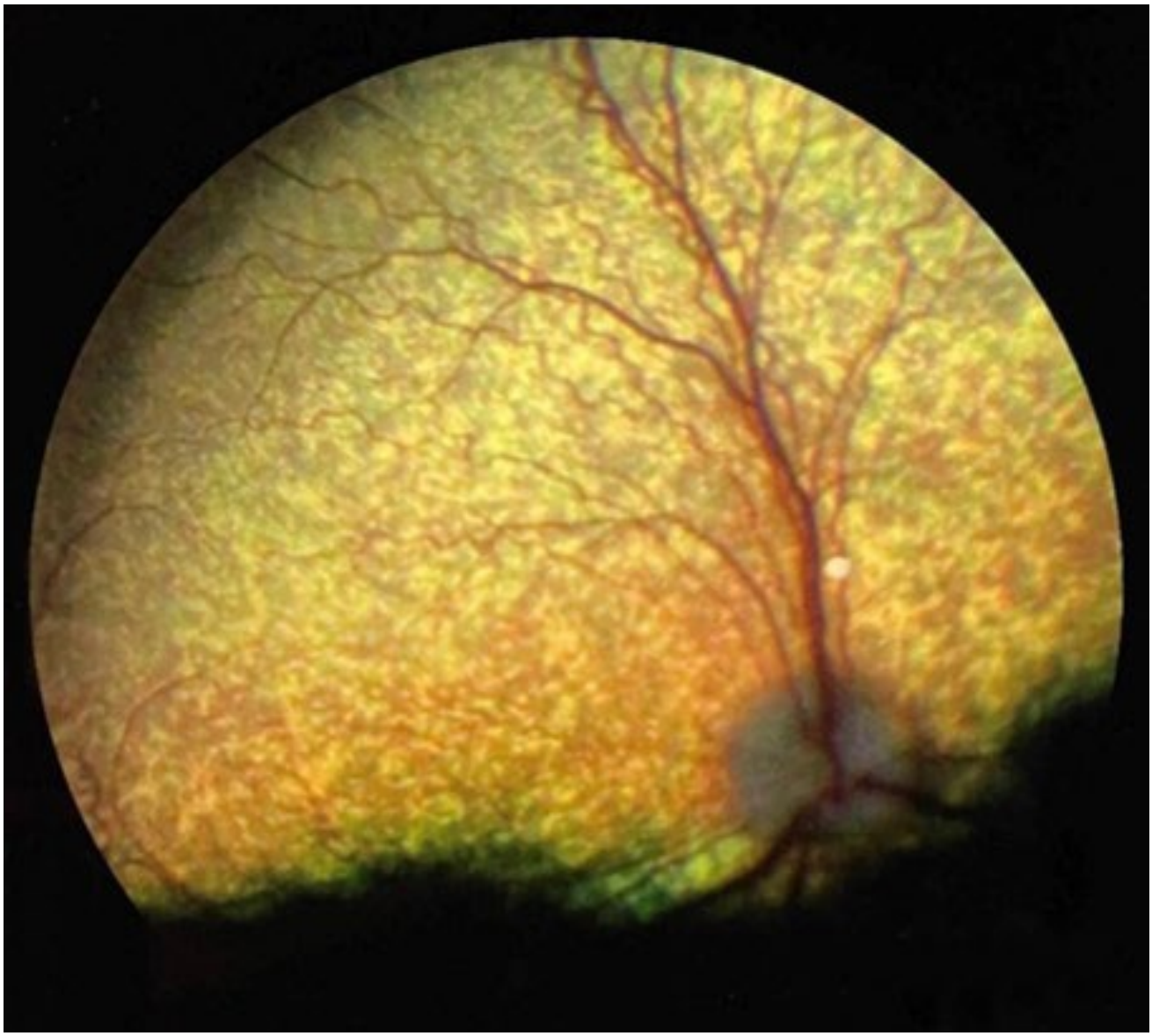
The appearance of ABCA4insC/insC (canine Stargardt disease) is variable and changes over time. The earliest sign reported in young dogs (even younger than 1 year) is a subtle, small, dark/brownish discolouration the central part of area centralis. Mild, slowly progressive signs of diffuse degeneration in the area centralis and visual streak have not been apparent until middle age, and later, the degeneration with mild-moderate vascular attenuation and abnormal tapetal reflection (mainly hyporeflection) spread towards the periphery. Older dogs may develop dark brownish tapetal spots and tapetal hyperreflectivity in the area centralis and visual streak

New data

New references

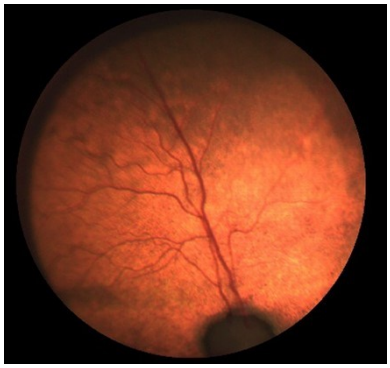
Björn Ekesten; Suvi Mäkeläinen; Stuart Ellis; Ulrika Kjellström; Tomas F. Bergström
Abnormal Appearance of the Area Centralis in Labrador Retrievers With an *ABCA4* Loss-of-function Mutation. Translational Vision Science & Technology February 2022, Vol.11, 36.

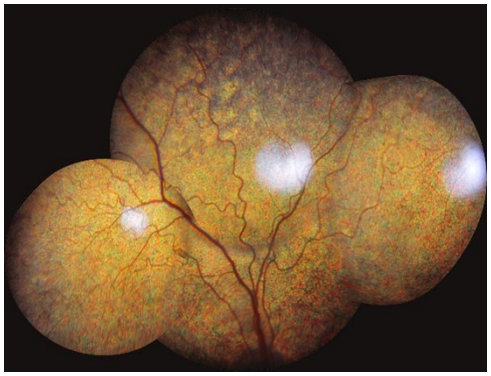
See Ch 9 (point L) for further information and Ch 8 for veterinary advice



SHETLAND SHEEPDOG

Slowly progressing retinopathy (SPR) primary retinal disease





Photos by courtesy of Lena Karlstam and Björn Ekesten

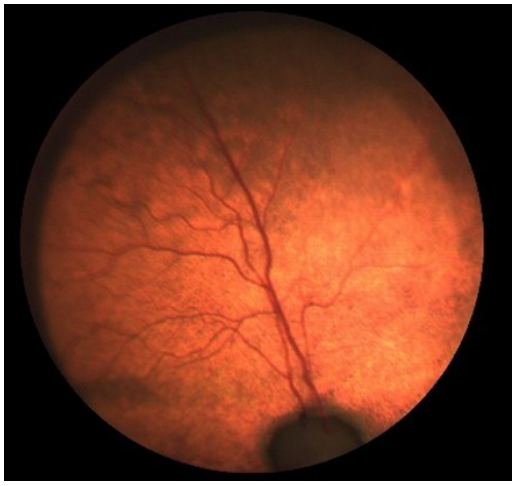
Clinical description

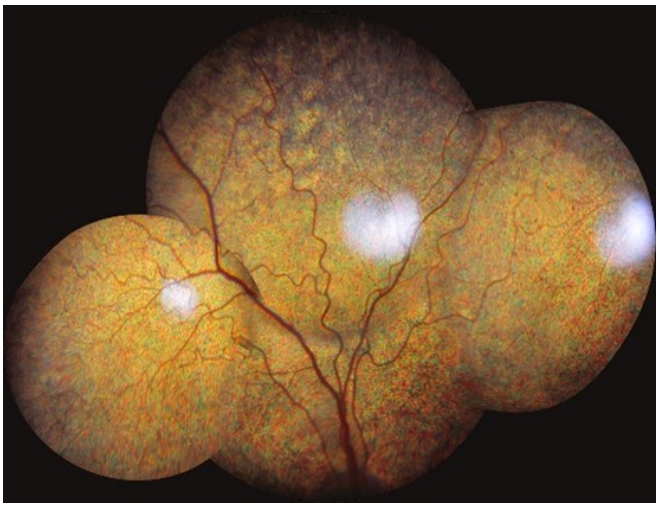
A rod-cone degeneration resembling early stage generalized PRA has been described. Ophthalmoscopically a bilateral, symmetrical greyish hyporreflectivity mainly in the periphery of the tapetum, but also in between the retinal vessels extending centrally was seen. The changes progressed very slowly toward the central tapetal fundus. The transition from hyporeflective areas to areas of normal appearing tapetal reflection was gradual without a distinct border. Attenuation of retinal vessels was an inconsistent finding. No signs of hyperreflexion in the tapetal area nor pigment migration in the non tapetal fundus were noticed. The retinal vessels had normal caliber in the majority of the dogs.

New data

New references

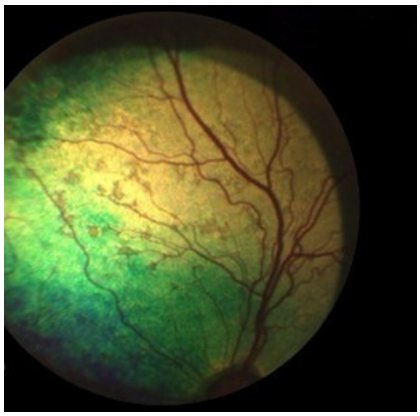
See Ch 9 (point G) for further information and Ch 8 for veterinary advice





SWEDISH VALLHUND

Retinopathy, primary retinal disease



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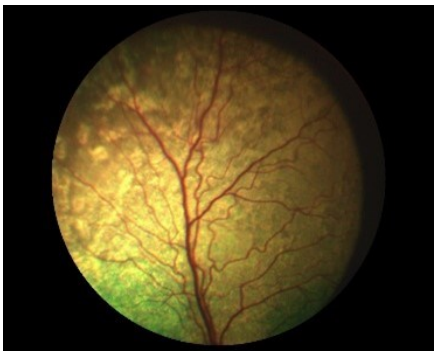

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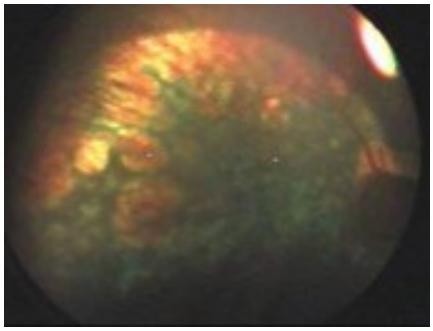


3.

Photos by courtesy of Kristina Narfström and Lena Karlstam

Clinical description

Three stages have been described:

Slide 1, STAGE 1: Diffuse, multifocal red to brown changes. Bilateral, non-symmetrical. No visual problems

Slide 2, STAGE 2: Hyperreflectivity in the spotted areas with gray discoloration, generalized slight vascular attenuation

Slide 3, STAGE 3: Generalized retinal thinning with large, bright hyperrreflective regions affecting most of the tapetal fundus, sometimes with a wider conus or arcus around the optic nerve head.

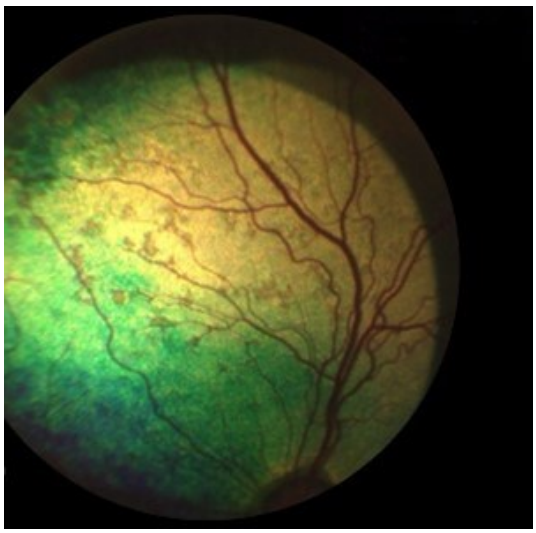
Non-recordable ERGs.

The variability in the age of disease onset and rate of progression suggest the presence of genetic and/ or environmental disease modifiers.

New data

New references

See Ch 9 (point A) for further information and Ch 8 for veterinary advice



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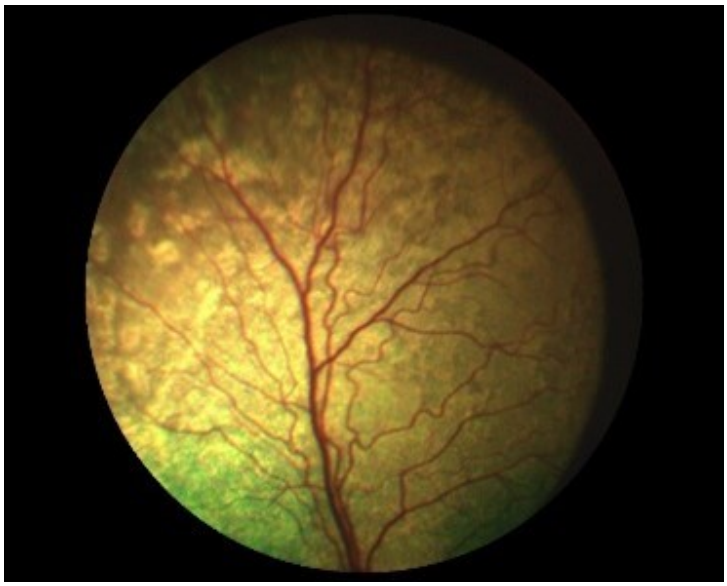

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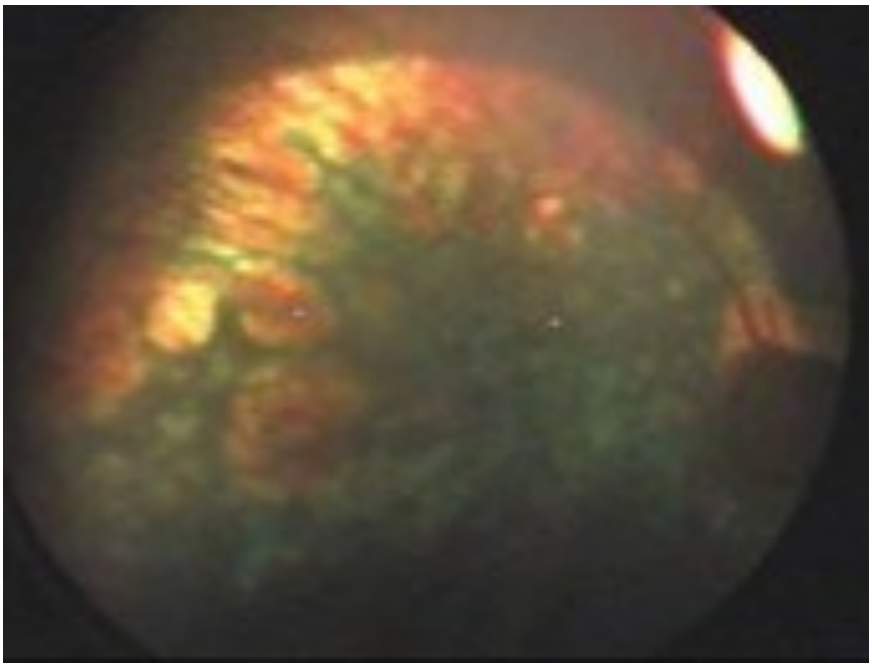

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