



In one sentence, define Coats disease.





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A congenital (usually) retinal vascular condition characterized by exudation that can be severe enough to result in massive retinal detachment

Q

Coats Disease vs Retinoblastoma



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In one sentence, define retinoblastoma (Rb).





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- --Exophytic
- --Endophytic
- -- Diffuse infiltrating





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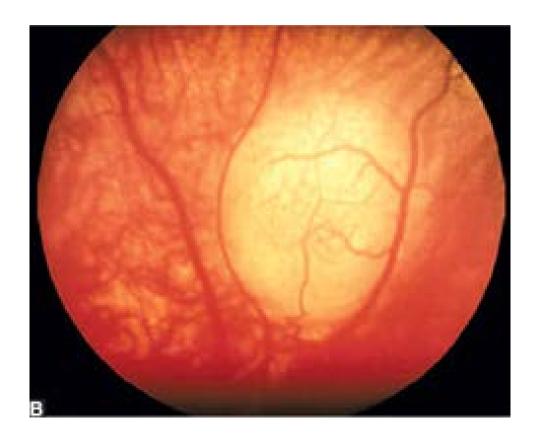
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Rb: Exophytic type





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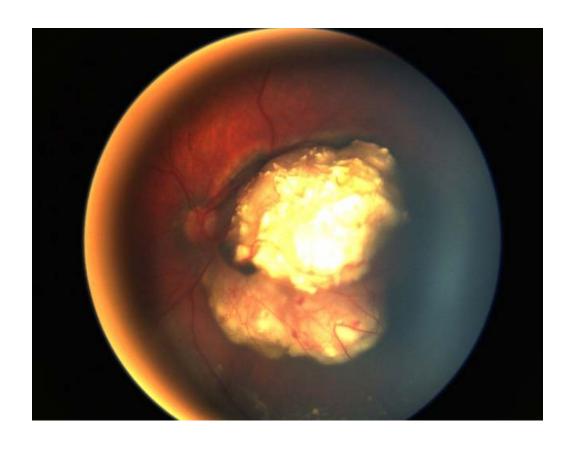
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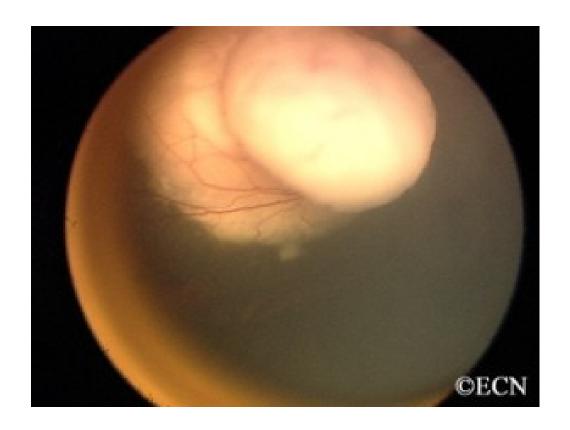
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Rb: Endophytic type





Rb: Tumor with both exophytic and endophytic portions





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Rb: Diffuse infiltrating type





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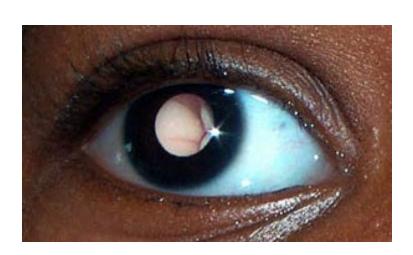
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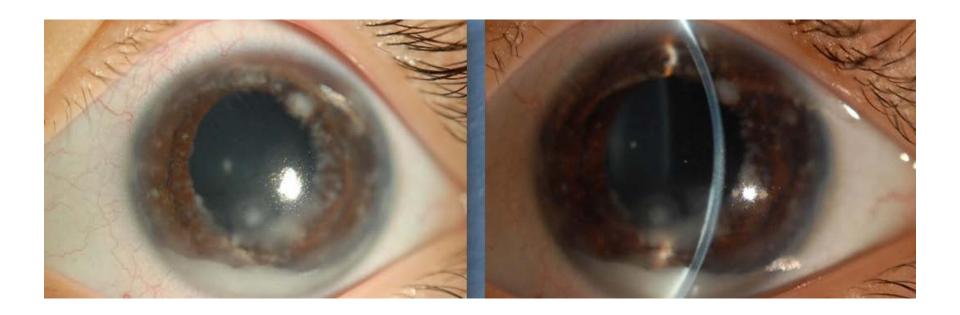
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Pseudohypopyon in diffuse infiltrating Rb





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How does the pseudohypopyon of diffuse infiltrating Rb differ from a true inflammatory hypopyon?

- --Unlike a hypopyon, the pseudohypopyon will shift easily with changes in head position
- --The pseudohypopyon is color , as opposed to the color of a true hypopyon





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How does the pseudohypopyon of diffuse infiltrating Rb differ from a true inflammatory hypopyon?

- --Unlike a hypopyon, the pseudohypopyon will shift easily with changes in head position
- --The pseudohypopyon is snow-white, as opposed to the yellowish tinge of a true hypopyon





Pseudohypopyon in diffuse infiltrating Rb



Hypopyon in uveitis

Q



	Coats	Rb
Age (yrs) at presentation	?	?





	Coats	Rb
Age (yrs) at presentation	6-8	1-2
,		

Q



	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Can	Coats occur in adulthood?	





	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Can Yes	Coats occur in adulthood?	

Q



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Q



	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Sex	?	?





	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Sex	Male in 75-85%	M = F



	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Sex	Male in 75-85%	M = F
% unilateral	?	?





	Coats	Rb
Age (yrs) at presentation	6-8	1-2
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% unilateral	75 - 95	60

Q



	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Sex	Male in 75-85%	M = F
% unilateral	75 - 95	60
Cataract?	?	?





	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Sex	Male in 75-85%	M = F
% unilateral	75 - 95	60
Cataract?	No	Only very late in advanced cases



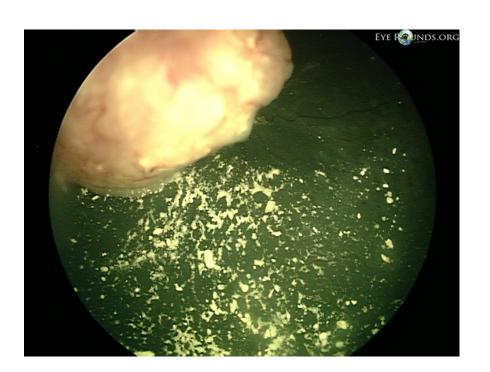
	Coats	Rb
Age (yrs) at presentation	6-8	1-2
Sex	Male in 75-85%	M = F
% unilateral	75 - 95	60
Cataract?	No	Only very late in advanced cases
Vitreous involvement?	?	?

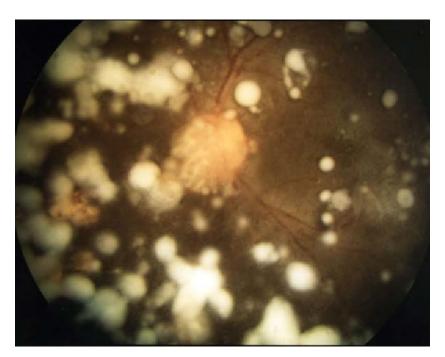




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Age (yrs) at presentation	6-8	1-2
Sex	Male in 75-85%	M = F
% unilateral	75 - 95	60
Cataract?	No	Only very late in advanced cases
Vitreous involvement?	No	Frequently (Seeding)







Rb: Vitreous seeding



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Vitreous involvement?	No	Frequently (Seeding)
Exudate?	?	?



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Exudate?	Yes	No







Coats disease: Exudation



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Exudate?	Yes	No
RD?	?	?
(retinal detachment)		



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Exudate?	Yes	No
RD?	Yes	Yes
<i>b</i> -scan of sub-RD space reveals	?	?



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Exudate?	Yes	No
RD?	Yes	Yes
<i>b</i> -scan of sub-RD space reveals	No calcifications	Calcifications









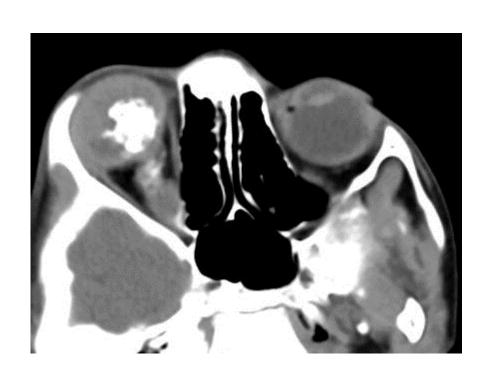


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<i>b</i> -scan of sub-RD space reveals	No calcifications	Calcifications
CT reveals	?	?



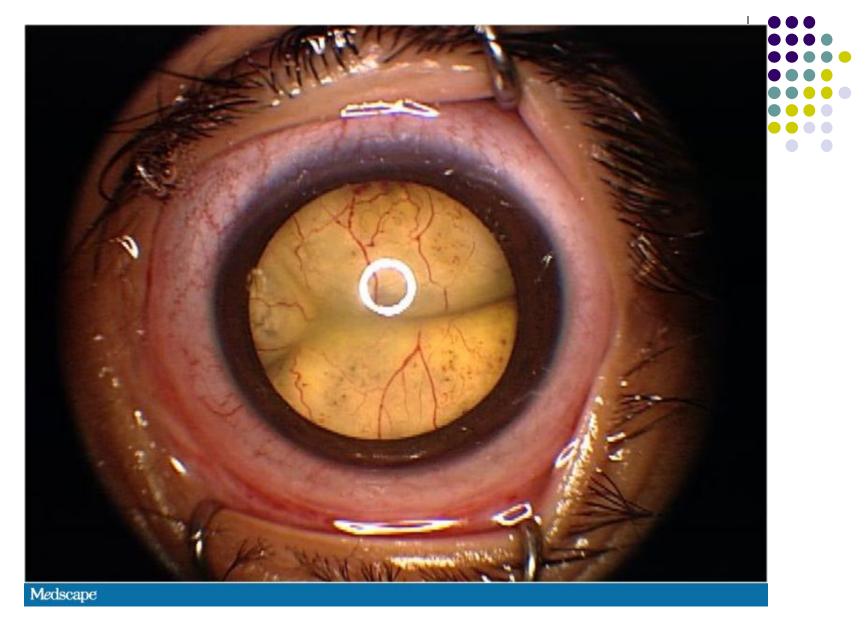
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RD?	Yes	Yes
<i>b</i> -scan of sub-RD space reveals	No calcifications	Calcifications
CT reveals	RD	RD + Ca ²⁺



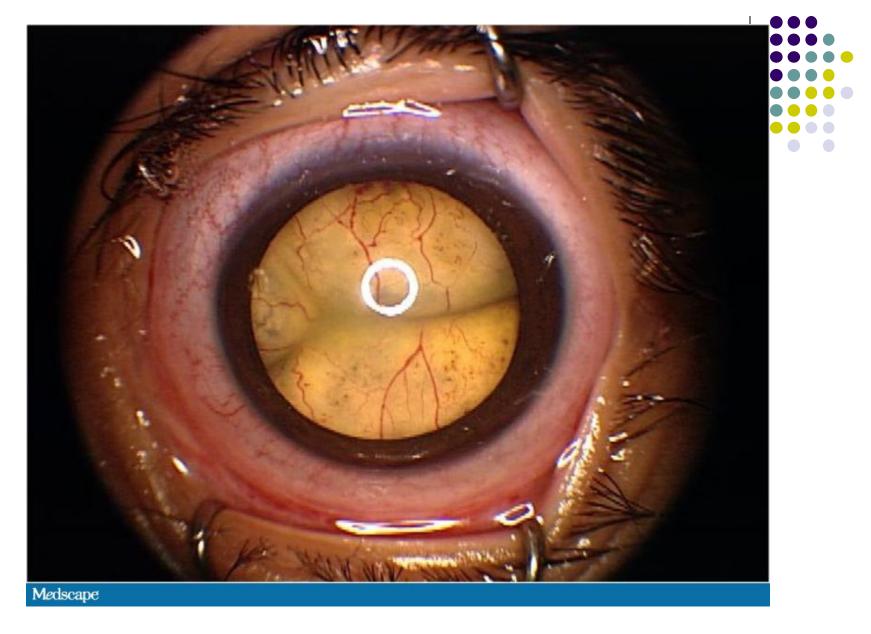




Rb: Calcifications on CT

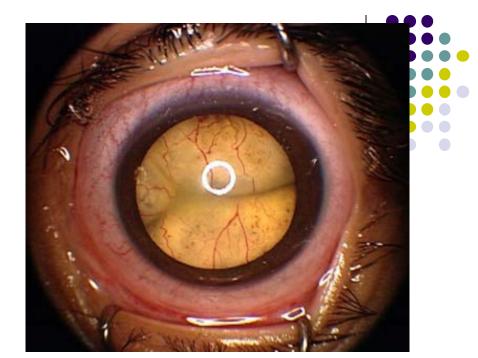


OK, quiz time. Is it Coats, or exophytic Rb?

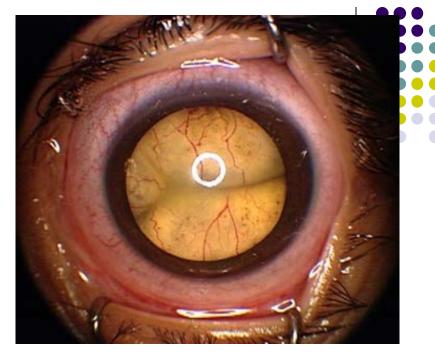


To figure it out, <u>look at the vasculature</u>

In Coats, the retinal vessels are dilated, with microaneurysms and telangiectasias. (Further, the appearance often has a yellow hue.)



In Coats, the retinal vessels are dilated, with microaneurysms and telangiectasias. (Further, the appearance often has a yellow hue.)



Contrast with Rb, in which the retinal vessels are *normal* in appearance. (And the hue tends to be white.)

