Outer Retinal Degeneration in a Cynomolgus Monkey (*Macaca fascicularis*)

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Experimental Design:
One male Mauritius-origin cynomolgus monkey (*Macaca fascicularis*) that was part of a control group in a two week intravenous injection study of a drug candidate had an unusual bilateral retinal finding.

Methods:
Control animals received aqueous-buffered vehicle only. Eyes were immersed in Modified Davidson’s fixative, processed, sectioned horizontally.
Unaffected
Affected
Unaffected
Unaffected
Affected
Unaffected Peripheral Retina

Affected Central Retina
Bilateral outer retinal degeneration:

Loss of photoreceptor outer segments;
Reduction in rod photoreceptor numbers;
Degeneration of cone photoreceptors characterized by peripheral displacement of cone nuclei across the outer limiting membrane;
Decrease in the thickness of the outer nuclear layer.

Foveal and peripheral retina were unaffected.
Cynomolgus monkey, ora serrata

Diagnosis?

Glial Nodule
Vs.
Glial Hamartoma
Vs.
?