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Mathematical Models of Retinitis Pigmentosa: The Oxygen Toxicity Hypothesis

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Highlights

- Hyperoxia can explain some of the patterns of photoreceptor degeneration seen *in vivo*.
- Patches of retinal loss will grow if photoreceptor density is low at their boundaries.
- The wave speed of retinal degeneration decreases as photoreceptor density increases.
- Treatment with antioxidants and trophic factors may limit photoreceptor degeneration.
- Capillary loss may limit photoreceptor degeneration.

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