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Abnormal Retinal Waveforms in rd/rd mouse Recorded with Multielectrode Array

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We investigated the differences of the retinal waveforms in normal and degenerate retina. Multielectrode recordings were performed in the isolated mouse retina. In normal mouse (C57BL/6J strain) of 4 weeks old, only short duration (< 2 ms) ganglion cell spikes were recorded. In rd/rd mouse (C3H/HeJ strain), besides normal spikes, waveforms with long duration (~ 100 ms) were recorded. We tried to understand the circuit of visual signaling in degenerate retina using many different synaptic blockers.

Keywords: Retinal Spike, Degenerate Retina, Multielectrode Recording