Iganidipine is a Ca\(^{2+}\) antagonist.

**In Vivo**
Iganidipine (0.03%) solution significantly increases optic nerve head (ONH) tissue blood velocity (NB\(_{\text{ONH}}\)) by 8 to 10% in treated eyes after a single administration (p<0.05) or by 18 to 35% after 7-, 14-, or 21-day twice-daily administration in rabbits (p<0.05). In monkeys, 0.03% and 0.1% Iganidipine significantly increases NB\(_{\text{ONH}}\) in treated eyes by 20 and 41% after 7-day (p<0.05) twice-daily administration, respectively\(^1\).

**Protocol**

**Animal Administration**\(^1\)
Five adult cynomolgus monkeys (age, 5-8 years; weight, 3-5 kg; sex, 5 males) are used. All examinations are performed with the monkeys sitting in a modified monkey chair. On the first experimental day, after general anesthesia is induced by Ketamine hydrochloride at a dose of 8 to 10 mg/kg intramuscularly, pupil dilation is induced with one drop of Tropicamide in both eyes. The NB\(_{\text{ONH}}\), IOP, blood pressure, pulse rate, SaO\(_2\), and body temperature are measured at 9AM. Starting on the 2nd experimental day, Iganidipine (0.03% or 0.1%, 30 mL) is administered in one randomly chosen eye and vehicle solution into the other eye twice daily at 8AM and 8PM for 7 days. At 9AM on the 8th experimental day, the same measurements are repeated after general anesthesia and bilateral pupil dilation. After a 4-week interval, a second series of experiments is performed using a different Iganidipine concentration according to the same time schedule.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**References**

Caution: Product has not been fully validated for medical applications. For research use only.

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