



January 30, 2024

For Immediate Release

Contact:

John C. Hagan, III, MD, Missouri Medicine Editor at Drjhagan3@gmail.com

KANSAS CITY MO—New Delivery of Nasal Spray Beta Blocker Offers Promising Treatment for Acute Migraine

An innovative, new treatment of acute migraines using a nasal spray of the beta blocker drug Timolol 0.5% solution is reported in a first of its kind world research paper in the January/February 2024 issue of *Missouri Medicine* medical journal.

Timolol is FDA approved for treatment of migraines in pill form. Researchers Steven C. Kosa, MD, a Kansas City neurologist specializing in headache treatment, and John C. Hagan III, MD, a Kansas City researcher who began experiments using timolol solutions over a decade ago, report a 62.5% favorable response to a timolol nasal spray in a series of difficult migraine patients referred to Dr. Kosa's headache clinic in Kansas City, Missouri.

The nasal spray is produced by a national compounding pharmacy headquartered in Kansas City. The timolol nasal spray is now available to licensed physicians for off label use.

View the World First Literature Report and the science behind the relief of migraine sufferers at <https://www.msma.org/Beta-Blockers-Migraine/>

Migraine is the third most prevalent disease in the world and foremost among common neurological illnesses. One out of every four households in the United States has someone with migraine; there are more than forty-two million Americans and more than a billion migraine headache sufferers world-wide.

Interviews are available with Dr. Kosa and background on the development of this innovative therapy is available from John C. Hagan III, MD, who has been conducting research on Timolol 0.5% eye drops and nasal spray for over a decade at Drjhagan3@gmail.com.

###