

# Nasal Delivery Of Medicine Allows Faster Absorption And Quicker Relief

University of Kentucky



Developed at University of Kentucky's College of Pharmacy in 1980 by Professor Anwar A. Hussain, Ph.D., the "Method of Administering Narcotic Antagonists and Analgesics and Novel Dosage Forms Containing Same" was a pioneering nasal delivery method for administering medicine. Initial funding was provided by the University of Kentucky.

The invention, marketed as Stadol N consists of a salt of butorphanol, a pain reliever, which is a component of a gel that is applied directly through the nose.

“ *This invention provides a method of administering narcotic analgesics such as butorphanol, or other compounds that are adapted for nasal administration.* ”

Nasal administration is as effective as injections because the drug is rapidly absorbed by the nasal membranes. In addition, some drugs that are taken orally are poorly absorbed because they are utilized in metabolic processes in the

digestive tract; this is avoided when the drugs are delivered nasally. Patients can more easily treat themselves as needed with nasal delivery, compared to delivery via injection.

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