National trial to test new treatment for chronic, severe indigestion

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Could medicines used for depression also treat chronic, severe indigestion? Scientists at Mayo Clinic suspect they can and, backed by funding from the National Institutes of Health (NIH), they are testing that premise in a nationwide clinical trial.

"Nerve cells are found throughout the body, and just as their dysfunction in the brain can cause depression, we suspect overly sensitive nerves in the gut can produce this very uncomfortable indigestion," says Nicholas Talley, M.D., Ph.D., chair of the trial and chair of the Department of Internal Medicine at the Mayo Clinic campus in Florida.

The study, which will include 400 adult men and women who have been diagnosed with functional dyspepsia, is being offered at all three Mayo Clinic campuses (Florida, Minnesota, and Arizona) and at Northwestern University, Saint Louis University School of Medicine, Dartmouth-Hitchcock Medical Center, and Baylor College of Medicine. Trial participants will be treated for three months with one of two different types of Food and Drug Administration (FDA)-approved antidepressant medications or with an inert placebo pill.

Functional dyspepsia is believed to be very common but is often confused with other gut maladies, such as acid reflux (also known as gastroesophageal reflux disease or GERD) and irritable bowel syndrome, Dr. Talley says. "The classic symptom of dyspepsia is a feeling of uncomfortable fullness after eating. A person feels bloated right away, and can experience cramping or gas," he says. "Often a person can't

finish a meal because of these symptoms. It doesn't always happen with every meal, but during most of them."

The NIH recently expanded the scope of the clinical trial, which is known as the Functional Dyspepsia Treatment Trial (FDTT). It will now include four times as many patients (over 100 patients are in the study now), will run for three more years, and will receive an additional $1.2 million in federal support. "The NIH and the researchers involved in this clinical trial are very hopeful that results of this important study might, someday, help a lot of people who suffer from this disorder," Dr. Talley says.

For many patients who have functional dyspepsia, antacids (such as Rolaids) and acid-suppressing medications (like Zantac) don't work, nor does so-called proton pump inhibitors such as Prilosec, Dr. Talley says. That's because symptoms of the disorder are thought to result from abnormal muscle activity within the stomach, which may be caused by abnormal sensitivity of the nerves in the stomach or irregular signals from the brain to the muscles in the gut, he says.

"While we do not know the exact cause of functional dyspepsia, we do know that the disorder can cause chronic and sometimes debilitating symptoms that can have a dramatic effect on the quality of life for functional dyspepsia sufferers," says Patricia Robuck, Ph.D. She is project scientist for FDTT and director of the Clinical Trials Program of the Division of Digestive Diseases and Nutrition, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), the sponsor of the FDTT at NIH. "We are interested in learning more about the brain-gut interaction and physiological effects of these two similar but different classes of drugs on the symptoms associated with functional dyspepsia."

The FDTT clinical trial is based on findings from small studies using

amitriptyline (Elavil) and escitalopram (Lexapro) that suggested abdominal pain may get better in adults with the disorder, says Dr. Talley. "We were excited by these early findings, which has led to this clinical trial," he says. "If it turns out that these drugs correct stomach emptying, stomach retention, and overall motility, we could help improve the quality of health and life for the millions of people with functional dyspepsia."

In the study, participants with functional dyspepsia who have not responded to other treatments are randomized to receive amitriptyline, escitalopram or a placebo. The clinical trial is blinded, meaning that neither researchers nor participants will know who received which agent until the study is completed and results are tabulated.

The researchers will also examine the activity of certain genes to see if they can predict who best will respond to the medications.

Participants will be in the study for nine months, including three months of active treatment and six months of following their progress. Costs of the study medicine and some patient expenses are covered, and researchers have tried to minimize the number of patient visits that are required to participating institutions, Dr. Talley says.

Source: Mayo Clinic (news : web)