

Jan & Tom Lewis Migraine Treatment Program



MIGRAINE CAN STOP your life in its tracks. Over one billion people worldwide—about 17 percent of the population—suffer from migraine. In the United States, approximately 39 million people experience migraine, with 157 million workdays lost each year due to the illness.

The Jan & Tom Lewis Migraine Treatment Program at Barrow Neurological Institute is dedicated to providing comprehensive, world-class clinical care to patients suffering from migraine and other headache conditions. Led by Kerry Knievel, DO, the team of skilled headache specialists at Barrow strive to tailor care to each patient's individual diagnosis and symptoms. Therapies provided include cutting-edge medications for prevention and acute treatment, in-office procedures for headache treatment, physical therapy, yoga, stress management, dietary and lifestyle changes, or a combination of these.

↑ Jan Lewis, one of the namesakes of the Jan & Tom Lewis Migraine Treatment Program, is a patient of Dr. Kerry Knievel.



9,123

overall patient visits



1,513

new patients



63

patients enrolled
across 4 clinical trials

BARROW NEUROLOGICAL INSTITUTE BY THE NUMBERS



CLINICAL IMPACT

77,600+

total number of patients
seen at Barrow annually

22,200+

telemedicine visits

5,700+

brain and spine surgeries



GLOBAL IMPACT

11

research fellows and
visiting scholars from
Brazil, Columbia, India,
Ireland, Pakistan, Russia,
Thailand, and Turkey

PROGRAM ACCOMPLISHMENTS

As part of its mission to educate and train the next generation of the world's leading headache specialists, Barrow welcomed Shane Root, MD, to the Migraine Program as an attending neurologist in July 2021. He was the first Barrow headache fellow and joined the headache team upon graduation. The addition of Dr. Root allows for increased access to providers for established patients and helps accommodate the 20 percent year-after-year growth in new headache patients.

When COVID-19 hit, the headache team had to quickly convert a majority of its clinic visits to telemedicine appointments, seeing over 1,400 patients via telehealth last year. Many patients greatly appreciated attending routine appointments via telehealth, as it prevented migraine triggered by stressors such as travel and missed work, in addition to reduced concerns of COVID-19 exposure.

While in-person education events were put on hold due to the pandemic, Barrow headache providers hosted a virtual session of Headache 101 in March 2021. The event aimed to teach primary care physicians how to diagnose and manage their patients' headaches. Headache 101 is available on the Barrow website as both an accredited continuing medical education (CME) course and a non-CME webinar. Next spring, Headache 101 will be expanded to include a morning session and an afternoon session that features hands-on, case-based instruction.

RESEARCH ADVANCES

Research and clinical trials have continued to expand rapidly. Since January 2021, 63 clinical trial participants have been enrolled across four studies, which is over double the amount enrolled in 2020. To accommodate this growth, the team welcomed two new clinical research specialists and a new regulatory specialist.

One study, the Thecal Sac Volume Research Protocol, explores whether patients with cerebrospinal fluid (CSF) leak have larger volumes of spinal fluid in their lumbar spine and whether that anatomy contributes to symptoms similar to CSF leak. This involved the enrollment of healthy controls for comparison. Initial data yielded very positive results and Dr. Knievel and her team will move forward with the study, continuing to enroll participants and collect data on the remaining 30 CSF leak patients and 30 healthy, non-headache control participants.

The Cerebrospinal Fluid Leak Database will be used to determine whether specific symptoms, imaging, or other clinical features predict



Dr. Knievel is on the board of directors and is the president of the Headache Cooperative of the Pacific (HCOP). Barrow's involvement in the HCOP has positioned the Jan & Tom Lewis Migraine Treatment Program to receive international attention.

outcomes, and to determine which diagnostic or treatment paradigm would be the best fit for patients. Within the past year, Dr. Knievel and her team have gained Institutional Review Board approval for the database and have begun adding information to it. This has the potential to improve standards of care for patients globally.

Jennifer Robblee, MD, a Barrow headache neurologist, is leading a post-market study of three recently FDA-approved acute migraine therapies: Ubrogepant, Rimegepant, and Lasmiditan. The study will look at patient preference, side effects, use with concurrent medications, and safety in patients with vascular disease. Patient follow ups will be conducted at clinic visits and via telephone. Post-market studies help broaden physicians' understanding of patient responses and can help inform clinical decision making.

ON THE HORIZON

In 2022, the Jan & Tom Lewis Migraine Treatment Program will welcome a new headache fellow, as well as identify and recruit a translational research scientist for the growing clinical trials program. To expand the headache center's wellness program, the team recently recruited an in-house physical therapist who specializes in migraine relief. The physical therapist will also teach yoga classes once they resume in person. Currently, patients can access recorded yoga videos on demand via the Barrow website. The headache team will also recruit an outreach coordinator, who is a licensed medical social worker, to assist patients in preparing for appointments, authorizing prescriptions and renewals, finding community resources, and enrolling in research studies.

BARROW NEUROLOGICAL INSTITUTE BY THE NUMBERS



RESEARCH

320+
active research
studies

791
patients enrolled
in clinical trials

\$11.7 MILLION
in federal research
grant support



DONOR IMPACT

\$28 MILLION
total distributed to Barrow
Neurological Institute,
including:

\$21 MILLION
designated to specific
centers/programs

\$5 MILLION
for basic, clinical, and
translational research

\$1.7 MILLION
for endowed research chairs



THANK YOU FOR YOUR SUPPORT

Thank you for your support of the Jan & Tom Lewis Migraine Treatment Program. Migraine is a complicated and multifaceted disease, so our team focuses on treating patients as individuals, finding their specific triggers to identify a customized and multifaceted treatment plan that works for them. This allows us to help them prevent their headaches and quickly stop breakthrough headaches when they occur, greatly improving their quality of life.

Without your support, we would not be able to expand education and outreach, provide unsurpassed clinical care, and conduct groundbreaking research to help those suffering from debilitating headache and migraine conditions. On behalf of the entire headache team, thank you for your generosity and dedication.

With gratitude,
Kerry Knievel, DO
Director, Jan & Tom Lewis Migraine Treatment Program
Barrow Neurological Institute

↑ Pictured: (back row) Rachel Stanci, Dr. Knievel, Karissa Secora, Lauren Harvey, Luz Navarro, Dr. Roblee, Dr. Root (front row) Antonia Hernandez, Aide Raya, Lydia Westergard, Sarya Reid-Tate, Veronica Ciudad Real, Brandy Harmon

The mission of Barrow Neurological Foundation is simple: to be the catalyst of our donors' passion for transformation by providing the resources for Barrow Neurological Institute to achieve its mission of saving human lives through innovative treatment, groundbreaking research, and by educating the next generation of the world's leading neuroclinicians.