The Adult Hydrocephalus Center at Sinai Hospital specializes in the diagnosis, treatment and management of normal pressure hydrocephalus (NPH) and hydrocephalus diagnosed in young and middle-aged adults. Additionally, the trained medical staff in the center assists pediatric hydrocephalus patients as they transition into adulthood in their late teens.

“The Adult Hydrocephalus Center provides internationally recognized expertise in the diagnosis, treatment, long-term care and management of adults with hydrocephalus,” says Michael A. Williams, M.D., the center’s founder and director.

Howard Weiss, M.D., and Robin K. Wilson, M.D., Ph.D., join Williams in the center, located in the new Michel Mirowski, M.D., Medical Office Building on the Sinai Hospital campus. The center is a program of the LifeBridge Health Brain & Spine Institute.

Hydrocephalus is a condition characterized by an abnormal accumulation of cerebrospinal fluid within cavities called ventricles inside the brain. Hydrocephalus occurs when there is an imbalance between the amount of cerebrospinal fluid that is produced and the rate at which it is absorbed back into the bloodstream. As the fluid builds up, it causes the ventricles to enlarge and the pressure inside the head to increase, resulting in hydrocephalus.

The condition can result from a variety of causes and can occur at any age, though the most well-known forms of hydrocephalus are those that occur at the extremes of life – in infancy or the elderly.

In adults, symptoms of hydrocephalus can include difficulty with walking and balance, thinking and memory, and bladder control, as well as headaches, lethargy and difficulty staying awake.

The Adult Hydrocephalus Center at Sinai Hospital brings together physicians at the forefront of hydrocephalus diagnosis, treatment and research.

“Adult-Onset Normal Pressure Hydrocephalus

Normal pressure hydrocephalus occurs when accumulated cerebrospinal fluid causes the ventricles in the brain to become enlarged. The name of this condition, which has been known for over 40 years, is misleading, however, because fluid pressure can fluctuate from high to low levels.

In most cases of normal pressure hydrocephalus, the cause cannot be determined. However, it can develop as the result of a head injury, cranial surgery, meningitis, tumor or cysts, or bleeding within the brain. Unlike other forms of hydrocephalus, normal pressure hydrocephalus develops slowly over time and is most commonly seen in adults age 50 and older.

Patients who experience difficulty walking, mild dementia and impaired bladder control should be tested for normal pressure hydrocephalus, as it is one of the few treatable causes for these symptoms. Because the symptoms closely mirror Alzheimer’s and Parkinson’s disease, initially many cases are misdiagnosed.

However, with appropriate treatment, the symptoms of hydrocephalus can be reversed. Physicians at the Adult Hydrocephalus Center at Sinai perform a thorough clinical examination, followed by advanced computer testing to confirm the diagnosis. Surgical placement of a shunt in the brain is the most common and usually the only available treatment for normal pressure hydrocephalus. The surgery, performed by a skilled neurosurgeon, is a relatively short and uncomplicated procedure.

“One of the goals of the Adult Hydrocephalus Center is to provide family-centered care because this condition not only affects the patient, but the entire family as well,” says Weiss.

For more information about the Adult Hydrocephalus Center at Sinai Hospital or the LifeBridge Health Brain & Spine Institute, call 410-601-WELL (9355).