WAITING ROOM

Spin Doctors

f you've never experienced vertigo, check out Alfred Hitchcock's film noir classic by the same name: the sensational rooftop opener will make your head swim. Hitchcock knew the feeling of dizziness is as unsettling as it is common, which is why audiences have loved *Vertigo* since its release in 1958.

Actually, dizziness and vertigo are different. "Dizziness is a general term for spatial disorientation, while vertigo is an illusion of motion—usually spinning," explains Robert W. Baloh, M.D., professor of neurology and head and neck surgery at UCLA School of Medicine.

Vertigo can make your life miserable, and the majority of cases go untreated, says Dr. Baloh. An article in the journal *Neurology* in 2005 concluded that vertigo affects at least five percent of adults. According to the National Institutes of Health, a majority of people 70 years of age and older report dizziness and balance problems, and balance-related falls account for more than one-half of accidental deaths in the elderly. In one study of 65- to 75-year-olds, one-third reported that dizziness and imbalance have a negative impact on quality of life.

"The most common causes of vertigo are inner-ear problems: benign paroxysmal positional vertigo (BPPV), vestibular neuritis, and Meniere's syndrome," Dr. Baloh says. "But it is also a common symptom with migraine and occurs in at least 50 percent of patients with multiple sclerosis." **BPPV** (the most common cause of vertigo) involves intense, brief episodes of vertigo associated with a change in the position of your head, such as when sitting up in bed. "Most physicians—including some neurologists—prescribe meclizine (Antivert) for vertigo, regardless of the cause," Dr. Baloh says. "At best it provides symptomatic relief, particularly for associated nausea, but it does not address the underlying problem"—the breaking loose of normal calcium carbonate crystals in your ear. These crystals can fall into the wrong part of your inner ear canal and stimulate sensors, causing vertigo. Doctors don't know what causes BPPV, though it may be due to aging or head trauma. Thankfully, "there is a simple cure for BPPV," Dr. Baloh says: canalith repositioning, in which the doctor maneuvers your head so that the particles shift and can be reabsorbed into your body's fluids.

Vestibular neuritis, which may be caused by a virus, is an inflammation in the inner ear that causes sudden, intense vertigo along with nausea and vomiting. The episodes can last for days and sometimes require bed rest. Vestibular neuritis usually clears up on its own, although balance-retraining exercises—which you learn from a physical therapist—can speed recovery.

Meniere's disease produces excessive fluid buildup in your inner ear that causes sudden episodes of vertigo lasting 30 minutes or longer. Other symptoms include a feeling of fullness in the ear, buzzing or ringing in the ear (tinnitus),

WAITING ROOM



and fluctuating hearing loss. The cause of Meniere's disease is unknown. Treatment usually involves reducing your body's retention of fluids through diuretics or a low-salt diet.

To manage vertigo:

- ▶ Be aware of the possibility of losing your balance, which can lead to injury.
- Sit or lie down immediately when you feel dizzy.
- Avoid driving a car if you experience frequent dizziness.
- Use good lighting if you get out of bed at night.
- Walk with a cane for stability.
- Avoid using caffeine, alcohol, and tobacco, all of which restrict your blood vessels and worsen symptoms.
- Learn the physical techniques. "We teach patients to perform the particle-repositioning maneuver for recurrent BPPV," Dr. Baloh says. "And vestibular exercises are helpful if there is damage to the inner ear, such as occurs with vestibular neuritis."

In rare cases, vertigo can be a sign of a more serious neurological problem. "Vertigo can be the initial symptom of stroke," Dr. Baloh says, so he advises people to talk to their doctor "if they are older and have vascular risk factors, such as a prior stroke, hypertension, or diabetes." You should also see your doctor if your vertigo is accompanied by:

- ▶ A new. different. or severe headache
- Blurred or double vision
- Slurred speech
- Hearing loss
- Leg or arm weakness
- Loss of consciousness
- Falling or difficulty walking
- Numbness or tingling
- Chest pain or rapid or slow heart rate

Don't ignore vertigo or try to live with it. Let your neurologist help get you back on an even keel. ---Mike Smolinsky

BY THE NUMBERS

Myasthenia Gravis

yasthenia gravis (MG) is a neuromuscular disease causing muscle weakness that increases during activity. It is also an autoimmune disorder: in MG, the immune system attacks the body's own tissue at the junction between a nerve and a muscle and targets the part of a muscle that receives signals from a nerve. Muscles that control facial expression, eye movements, talking, swallowing, breathing, and limb movements are often affected. Although researchers are uncertain of its cause, they do not believe that MG is hereditary. MG is chronic, but it does not reduce life expectancy. Immunosuppressive drugs can improve muscle weakness.

2 in **10,000:**

The estimated prevalence of MG in the United States.

5-10:

The percentage of people with MG who have another autoimmune disease. People with one autoimmune disease have an increased risk of developing another one.

1.5: The number of females with MG for every 1 male.

Less than 50:

The percentage chance that one identical twin will develop the same autoimmune disease as his or her twin.

1():

The percentage number of MG cases that affect children.

Near O:

The estimated mortality rate when MG is properly treated. Most people with MG manage their symptoms and lead active lives.

The percentage of people with MG who experience a reversal of some or all symptoms.

—Compiled by Elizabeth Stump

Source: The Muscular Dystrophy Association, The Myasthenia Gravis Foundation of America, and the National Institute of Neurological Disorders and Stroke.

Can you figure out the common expression represented by each picture? NEUROBICS









SEE ANSWERS ON P. 16

NEUROLOGY NEWS

Epilepsy Drugs and IQ

hildren whose mothers took the epilepsy drug valproate (Depakote) during pregnancy may be at risk for having a lower intelligence quotient (IQ), according to a study presented at the annual meeting of the American Academy of Neurology.

Nearly one in four children whose mothers took valproate during pregnancy had an IQ in the mental retardation range (70 or less). By comparison, children whose mothers took other epilepsy drugs during pregnancy had a much lower risk of mental retardation: 12 percent for carbamazepine (Tegretol) or phenytoin (Dilantin), and 9 percent for lamotrigine (Lamictal).

Likewise, the average IQ of all children whose mother took valproate (84) was much lower than the average IQ of the children whose mothers took carbamazepine ((93), phenytoin (93) or lamotrigine (96).

Neurologists urged women of child-bearing age who are taking valproate to talk with their doctors about switching to another epilepsy drug. They emphasized, however, that women should not simply stop taking the drug-especially not if they're already pregnant.

"Probably the worst thing they could do is to stop taking the drug while pregnant, which could result in a prolonged seizure that would be really



bad for them and their baby," says Gregory L. Holmes, M.D. chief of neurology at Dartmouth-Hitchcock Medical Center in New Hampshire.

Expectant mothers who take valproate will probably be advised by their doctor to continue on the drug because switching epilepsy medications during pregnancy can be dangerous, Dr. Holmes said. But, he

added, "You'd probably want to keep the dose as low as possible.'

PAULUS RUSYANTO/ iSTOCKPHOTO; COURTESY ALAN BERLINER The study of 187 two-year-old children was carried out by Kimford Meador, M.D., of the University of Florida in Gainesville. -Dan Hurley



SCREENING ROOM Wide Awake

(Experiments in Time, Light, and Motion and HBO Documentary films, 2006; available on DVD)

hen Alan Berliner first showed his documentary about insomnia to a group of college students, five or six of them nodded off. But don't take that as a bad review: undergrads get less sleep than anyone in the U.S., and Wide Awake is an engaging peek into the filmmaker's strange, sleep-deprived life.

At first it's hard to relate to Berliner, who spends most of his time making movies and collecting old film reels and has the luxury of waking up after 9 a.m. He's a night owl.

But aren't we all? We work late, eat late, check e-mail at midnight, watch Jay Leno, and fuel ourselves with gallons of coffee. Wide Awake considers the toll this poor "sleep hygiene" takes on society-from car accidents to medical errors to bad political decisions-but primarily conveys the disoriented feeling of insomnia through rapid-fire photo sequences and repetitive sounds. If you have ever lied awake at night with the same thoughts looping through your head, listening to the thump-thump of your own heartbeat, you'll see a glimpse of yourself.

The scenes of Berliner consulting with (numerous) sleep specialists are funny and informative: you might be surprised by the number of factors that influence sleep quality, including genetics, childhood trauma, circadian rhythms, exposure to light, and diet. But the conversations that Berliner has with his mother, sister, and wife around the breakfast table are the most revealing. "This film took your obsession," his mother observes, "to greater heights." By the end, it seems like Berliner gets what he deserves. "I think I'm addicted to being awake," he says. Still, how many of us might say the same?

Wide Awake is not a fully satisfying look at what some doctors consider a public health crisis. But Berliner deserves credit for recognizing that sleep is a subject worthy of more research, more public discussion, and more art. ---Mike Smolinsky

WAITING ROOM

OUR KIND OF GUY:

Tending Goal with Tourette's

uring the final game of this summer's Gold Cup tournament between the U.S. soccer team and archrival Mexico, American goalkeeper Tim Howard's performance was noteworthy for two reasons. First, close-up shots of Howard when the ball was on the Mexican side of the field showed him blinking, twitching, and smacking his lips—symptoms of the Tourette's syndrome (TS) he lives with. Second, with minutes left in the

game and the U.S. clinging to a one-goal lead, it was Howard who made a magnificent, leaping save to deflect a Mexican volley that seemed destined to tie the score. When the U.S. held on to win, it was the second image that lasted.

Tourette's syndrome is a neurological disorder that causes involuntary motor or verbal tics. Only about 15 percent of people with TS experience the coprolalia (use of obscenities) that many people think define the syndrome.

Although Howard was diagnosed with TS at age 9, he has not let it slow him down. "I can embrace TS," he says, "I can meet it head on. I deal with it, I live with it, I try to excel with it, but I don't *suffer* from it."

Howard parlayed his goalkeeping success for the NY/NJ Metrostars of Major League Soccer into a tryout with one of England's most fabled franchises, Manchester United. He won both the starting job and the 2003-2004 Goalkeeper of the Year

award in the English Premier League. Today he stars for English club Everton and is the backbone of the U.S. national team.

Not wanting to dull the phenomenal reflexes that earn him a living, Howard has never taken medication for his tics. Many people with TS can control the involuntary tics enough to function normally without drugs. Some are helped by psychotherapy.

"It's your willpower versus what your mind is telling your body to do," Howard



says. While suppressing his tics through mental fortitude does not eliminate Howard's symptoms, it does delay them long enough to highlight his skills as an athlete.

Ask the Mexican national soccer team. In discussing their June defeat, the Mexicans made no mention of Tourette's. Ruefully, they did mention the diving save he made to keep them from victory.

Which is just how Howard would want it. —*Todd Farley*

EXPRESS YOURSELF THROUGH ART

Do you have a secret talent for drawing, painting, or graphic design? Send us your artwork about living with a neurological condition. One submission will be published in the Nov/Dec issue of *Neurology Now* and the artist will receive \$100. People with epilepsy can also submit art to the Expressions of Courage contest, co-sponsored by the Epilepsy Foundation and Ortho-McNeil (**expressionsofcourage.com**).

QUICK TIPS

Parkinson's Caregiving

onnie Ali, the wife of boxing champ Muhammad Ali, has been her husband's caregiver for the more than 20 years he has had Parkinson's Disease (PD). Together with PD specialist and University of Kansas neurology professor Rajesh Pahwa, M.D., Lonnie launched the Fight for MORE campaign in April. Her caregiving advice:

- ✓ FIGHT FOR MORE. "My husband and I focus on what he can do, not what he can't do. PD shouldn't stop you and your loved one from pursuing your dreams."
- STAY CONNECTED. "If you don't have family support, stay connected with friends, get involved with your community or in PD activism, or join an online community."
- EDUCATE YOURSELF. "Empower yourself and your family with knowledge about all aspects of the disease and caregiving."
- SEE A PD SPECIALIST REGULARLY. "Before visits, prepare a list of questions about new treatments, diet, and exercise, and discuss any side effects or behavioral changes."
- ✓ TAKE CARE OF YOU. "I'm an avid fiction reader and enjoy Pilates. Clear your head and come back with renewed energy."
- TRUST YOUR INSTINCTS. "Don't be afraid to ask questions. If you are not comfortable with a new doctor, medication, or at-home helper or nurse, speak up."
- For more information, go to FightForMore.com.

-Elizabeth Stump

NEUROBIC ANSWERS FROM P. 14: WORD IN EDGEWISE; BIG CHEESE; PIECE OF CAKE; FATHER TIME; ROUND ROBIN.

GO TO MINDWAREONLINE.COM FOR MORE WORD WINKS.