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Even Cowboys Get Migraines

After 35 years of suffering, Hall-of-Fame quarterback

Troy Aikman finally tackled his migraines.

BY TODD FARLEY

During the 1990s Troy Aikman was a record-setting quarterback for the Dallas Cowboys, leading “America’s Team” to 90 regular-season victories—more than any NFL quarterback ever in any decade—and three Super Bowl wins. What’s more, he built this Hall-of-Fame career while suffering from migraine, an often debilitating neurological condition that afflicts nearly 30 million Americans.

When Aikman first started experiencing headaches as a boy, he didn’t realize they were migraines. His older sister had already been diagnosed as a “migraineur,” but Aikman believed her headaches were different than his.

“She would be laid up,” Aikman recalls, “but I never had them to that point. I thought a migraine was just a severe headache that prevented you from functioning.”

More than just a bad headache, migraine is a complex neurological condition involving overstimulation of pain receptors, sensitization of parts of the brainstem, inflammation, and dilation of blood vessels. Defined as a recurrent disorder of attacks lasting between four and 72 hours, migraines are usually unilateral (occurring on one side of the head), have a pulsating or throbbing quality, are of moderate or severe intensity, and are aggravated by even routine physical activity. Accompanying symptoms often include nausea, photophobia (sensitivity to light), and

phonophobia (sensitivity to sound). Approximately 20 percent of sufferers experience an “aura,” a visual disturbance of flashing lights or zigzag lines that heralds the onset of an attack.

TOUGHING IT OUT

Although he didn’t know it, Aikman had been suffering a number of classic migraine symptoms: severe and throbbing pain in the temples, nausea, and an acute sensitivity to loud noises. Unfortunately, it was nearly 35 years after first experiencing those symptoms that Aikman was finally diagnosed with migraine—because he never consulted a doctor about his pain.

“My father never saw the doctor for anything,” Aikman laughs. “Like father, like son, I guess. Whereas for my sister it was encouraged—you better go get this checked out—for me it was never even suggested I go see someone about it. Or complain about it.”

Instead Aikman tried to tough out the pain, taking nothing stronger than aspirin while forging a successful football career at the high school, college, and pro levels. At times he would even have to take the field in the midst of a painful attack.

“There was never any question whether or not I was going to play,” Aikman says.

On the gridiron, Aikman dealt with his migraines stoically, especially when he made it to the NFL. “Every player, once you get into the season, is dealing with something,”

Migraine Symptoms

- Moderate to severe pain, which may be confined to one side of the head or may affect both sides
- Head pain with a pulsating or throbbing quality
- Pain that worsens with physical activity
- Pain that interferes with your regular activities
- Nausea with or without vomiting
- Sensitivity to light and sound

Source: Mayo Clinic

TROY'S TRIUMPHS
Aikman with the Dallas Cowboys in SuperBowl XXVII in 1993; at the 2006 Hall of Fame Induction; a Fox announcer with NY Giant's Eli Manning in 2008.



Aikman explains. "It's taboo to say, 'I've got a headache.' When you make a living getting hit, almost everyone has a headache, so it's not something that's much talked about."

It wasn't until 2006, five years after he retired from playing, that Aikman consulted with a physician. His job at Fox Sports entailed considerable air travel, which seemed to trigger attacks. "I was flying virtually every weekend and feeling miserable for hours at a time," Aikman says. "Finally I saw a doctor, and that's when I was diagnosed."

Toughing it out may have long-term negative consequences on the brain. "Repeated migraine attacks may lead to structural changes in the brain," says Nouchine Hadjikhani, M.D., associate professor of radiology at Harvard Medical School and lead author of a study published in *Neurology* in 2007 that found that part of the cortex area of the brain is thicker in people with migraine than in people without the disorder.

"Most of these people had been suffering from migraines since childhood, so the long-term overstimulation of the sensory fields in the cortex could explain these changes. It's also possible that people who develop migraines are naturally more sensitive to stimulation," Dr. Hadjikhani says. What this means for people with migraine is that pain should not be ignored. "Pain might have negative consequences on the brain," she says.

WHAT CAUSES MIGRAINE?

"We're still in the early stages of understanding this complicated disorder," says Michael Cutrer, M.D., head of the Division of Headache in the Department of Neurology at the Mayo Clinic in Rochester, MN. The cause of migraines has not been identified. Until recently they were thought to result from abnormalities in the brain's blood vessels.

"That's an old theory," says Barbara Scherokman, M.D., neurologist at the Permanente Medical Group in the Mid-Atlantic Region. "Now we know it's more of a brain problem, rather than just a blood-vessel problem."

Today researchers believe migraines occur as a result of a cascade of events involving changes in the trigeminal nerve (a major pain pathway), fluctuations in the level of serotonin (a chemical in the brain which regulates pain messages), and inflammation in pain-sensitive structures like the meninges (membranes that envelop the central nervous system). Although blood vessels play a part, they seem to be more a symptom than its cause.

Researchers also believe that migraines have a hereditary

aspect. According to Dr. Cutrer, migraine is "a complex genetic susceptibility transmitted in families, probably through multiple genes—a sort of maladaptive response." This "maladaptive response" is a vulnerability to activating pain systems that under normal circumstances serve as a warning system to protect the brain. Dr. Cutrer believes migraines are a combination of this genetic vulnerability and environmental factors that stimulate the overactive system.

"It's a dance between the genetics and the environmental triggering mechanisms," he says. (See *Migraine Triggers*, next page.) Stress can trigger migraines, but so can the release of stress; in fact, migraineurs often begin their vacations experiencing what Dr. Scherokman calls a "let-down migraine," which occurs after one persists through times of high pressure and finally relaxes. This is a "common pattern," Dr. Cutrer observes, referring to the reports of "many soldiers at the end of WWII having a migraine the day *after* the armistice was signed!"

If the list of possible triggers seems maddeningly comprehensive, Dr. Scherokman agrees. "It seems living can trigger a migraine," she says.

FINDING RELIEF

Not all migraineurs are lucky enough to identify their triggers, but Troy Aikman was. "Cigarette and cigar smoke and flying do it for me," Aikman says. "Limited sleep is a big trigger too."

However, because Aikman's career as a TV commentator includes regular air travel and irregular sleep patterns, he has been unable to avoid some of these triggers. It wasn't until his doctor prescribed him a migraine-specific medication that Aikman found any relief.

"I try to avoid taking medicine just for the sake of taking medicine," Aikman says. "But Imitrex [sumatriptan] has made a real difference."

For a long time there were few effective treatments for migraines. Often sufferers could do no better than to hole up in a dark room with an ice pack on their head, a remedy long-time migraineur Pam Oliver regularly settled for. Oliver, a reporter who works with Aikman at Fox Sports, suffered from migraines for more than 20 years. Visits to the emergency room frequently ended with sympathetic looks from doctors and bland bits of advice ("avoid stress"). Occasionally, Oliver says, she would get "shot up" with pain medications that helped only as long as they stayed in her system.

"It was very discouraging," Oliver says of those decades. "To

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suffer that long without having something that was working..."

Although "alternative" therapies are sometimes prescribed for migraines (biofeedback, hypnosis, meditation, yoga, or supplements like riboflavin or butter burr), treatments largely come in two categories: preventive medications and pain-relieving medications. The preventive medications—including beta-blockers, anti-depressants, and anti-seizure drugs—are taken regularly to reduce the frequency and intensity of migraine attacks.

The pain-relieving drugs are taken only after a migraine attack has begun. These "abortive" medications—which include triptans and non-steroidal anti-inflammatory drugs like ibuprofen or aspirin—are designed to address the pain of an individual migraine without conferring any protection against future attacks. Triptans (Axert, Relpax, Frova, Amerge, Maxalt, Imitrex, and Zomig) are a migraine-specific class of drugs that treat pain, nausea, and light and sound sensitivity. First prescribed in the 1990s, triptans are currently the "standard treatment" for severe migraine attacks, according to Dr. Cutrer.

Like Aikman, Pam Oliver found relief only after she discovered sumatriptan. "There wasn't as much lost time," she says.

LOOKING FORWARD

Although many of these medications are effective in the battle against migraines, scientists don't always know how they work. "It really is trial and error with migraine medications," Dr. Scherokman says. "Because one medication will work with one patient but not another, often we end up switching them to the next one."

The recently approved Treximet (sumatriptan and naproxen sodium) combines a triptan with an anti-inflammatory drug in one tablet. FDA testing showed that Treximet provided more sustained relief to migraineurs than did either a triptan or anti-inflammatory alone. Pam Oliver counts herself among the believers. "I have that period right after the migraine starts when I take Treximet and there's discomfort," she says, "but then it's 10, 20, 30 minutes, and I'm golden."

But triptans must be used with caution. If taken too frequently, they can lose their effectiveness or even cause an in-

crease in headaches ("rebound" headaches). Triptans may not be safe for people with coronary artery disease, and their use in combination with certain anti-depressants can lead to a life-threatening condition called serotonin syndrome.

Injections of botulinum toxin have been found effective at preventing migraines in some people for as long as three months.

Although clinical studies have shown mixed results—and the American Academy of Neurology concluded in 2008 that botulinum toxin is "probably ineffective in the treatment of episodic migraine"—the anecdotal evidence is more promising.

"I've had patients who have had 30 years of headaches," Dr. Scherokman says, "and you give them injections into their face or their neck and the headaches almost stop."

Dr. Cutrer is becoming convinced of botulinum's effectiveness as well. "In many people who are refractive to all the other treatments, it can be quite helpful," he says.

As scientists learn more about migraine, better treatments can be developed. "The brightest thing I see on the horizon are the beginnings of the investigation of migraine as a complex genetic disorder that might give us further insights into the mechanisms with which migraine occurs," he says. "Once you understand the mechanism, you can generate a treatment pretty quickly."

As for Troy Aikman, things have changed for the better. He now knows enough about migraine to help those like his friend Pam Oliver. Aikman had been reluctant to talk about his migraines because he didn't want people to assume there was a link between his lifelong affliction and the head injuries he

suffered as a quarterback. But when his doctors told Aikman his migraines resulted more from his genes, he decided to speak out.

"I could have been a bookkeeper and still suffered from migraines, especially having a family history of it," Aikman says. "I just know there are people out there suffering from migraines who don't even know it. If they would go see a doctor to get properly diagnosed they wouldn't have to experience some of that discomfort." NN

Todd Farley is a freelance writer who frequently reports on health, sports, and education. He lives in New York City.

Migraine Triggers

- Hormonal changes in women
- Certain foods, such as alcohol, aged cheeses, chocolate, caffeine (especially in large quantities), monosodium glutamate (MSG), and aspartame
- Sensory stimuli, such as bright lights or unusual odors
- Changes in sleeping-waking pattern
- Physical factors, such as exertion (including sexual activity)
- Changes in the environment (weather, season, altitude, barometric pressure, time zone)
- Certain medications

Source: Mayo Clinic