THE **Truth About Triggers** LET'S TALK ABOUT THE WEATHER

n a 2010 study published in the journal *Headache*, my colleagues and I found that "weather" was commonly cited as a migraine trigger. Does weather -or, perhaps more specifically, weather change – indeed trigger migraine? Spend some time listening to migraine patients, and one certainly would think so. Not a day goes by in my clinic based in downtown Washington, DC wherein multiple patients whose headache burden recently has increased attribute their worsening to DC's often capricious weather. "These back-and-forth changes in barometric pressure are killing me, doc," they say. It's the hot weather, it's the cold weather, it's the change from one to the other. Ignoring the stress induced by their daily 3 hour commute on traffic-choked highways and the intensity of the workplace itself, they place the blame on...the weather.

I lived in San Diego for 12 years, and even there, in a place blessed with as close to a perfect climate as one could wish for, my migraine patients constantly were invoking the weather as a migraine trigger. In particular, they pinned blame on the "Santa Anas", when for a few days the typical on-shore breeze would yield to dry winds blowing in from the desert, bringing with them sun-drenched, blue-skied days of warm temperatures, low humidity and perfect waves. While most San Diegans welcomed this intermittent climactic phenomenon, the migraine patients bemoaned the drop in barometric pressure and the severe migraine attacks this drop allegedly could produce. I recall one young man who finally had enough, sold his oceanside condo and fled for the "predictable" weather he recalled from his childhood in Minnesota.

Again, does the weather - and an abrupt barometric pressure change in particular - "trigger" migraine? What is the evidence?



Cluster headache is, like migraine, a primary headache disorder, and cluster definitely has a seasonal variation, tending to activate in the fall and spring. When migraine patients report that their headache disorder is much worse in the winter... or spring... or summer... or fall, how can we tell if it is the seasonal weather that causes the headaches, or something else about the season that predisposes to migraine?

In attempting to answer these questions I went to a friend and colleague, Dr. Alan Rapoport, a professor at UCLA and experienced clinical investigator who probably knows as much as anyone on the planet regarding migraine and its relation to weather.

Weather triggers headache attacks in up to half of all migraineurs...

After two decades spent studying the issue, Dr. Rapoport concludes that "weather" does indeed appear to serve as a headache trigger for as many as a half or more of migraineurs, but he emphasizes that "weather" is so complex and multifactorial that generalizations concerning one particular weather component may be inaccurate. "Complicating matters even more," Rapoport adds, "it may take a combination of triggers to generate a migraine attack. Maybe you're a little dehydrated. A Santa Ana wind is blowing. You didn't sleep well last night. You drink a second glass of red wine with dinner. What's the trigger? None of them? All of them?"

And perhaps therein lies the answer. There is only so much one can do about the weather. If certain types of weather do seem to act as a trigger for you, try to avoid your other triggers at "bad weather times", and be prepared. Carry your acute migraine treatment medications with you, and treat early and aggressively if an acute migraine attack begins to develop.