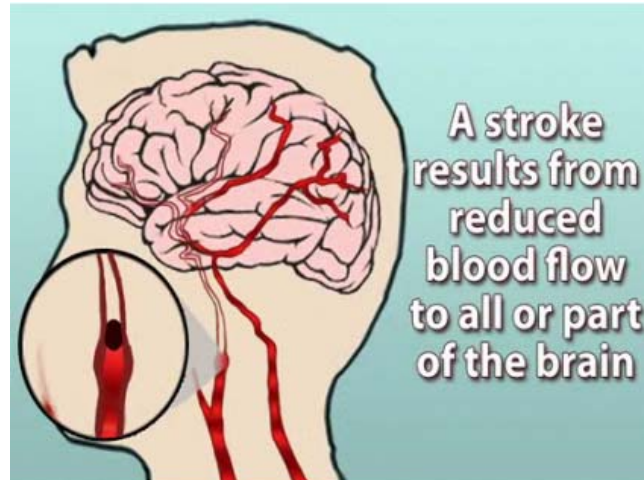


Strokes and seizures. Both can be very disturbing, but do they have anything else in common?



People sometimes confuse strokes and seizures, but they are two very different conditions. First, here are some basics about each. A stroke results from reduced blood flow to all or some part of the brain, in turn leading to the death of some brain cells. Meanwhile, a seizure is the result of excessive, synchronous electrical activity in brain circuits. Eventually, a brain affected by a seizure will recover. A seizure may appear more dramatic and upsetting, but a stroke is medically much more serious because in stroke brain cells die.

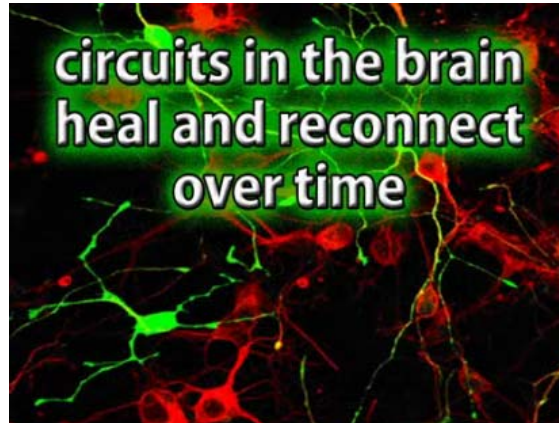
So how are strokes and seizures linked? First of all, strokes and seizures are common and some people can actually have both. Anything that injures the brain, including strokes, can lead later to seizures. In addition, strokes and transient ischemic attacks or TIAs,, which are sometimes called warning strokes, can be mistaken for seizures.

A seizure also can imitate stroke. However, it is important to note that seizures almost never cause strokes. However, a body part that is involved in a seizure may be temporarily weak or paralyzed and this can look like a stroke. Temporary paralysis post-seizure is called Todd's paresis. On rare occasions, about 2 to 5% of the time, a stroke will lead to one or more seizures. If seizures occur within a week of a stroke, then it is called an acute symptomatic seizure and is not diagnosed as being epilepsy. A seizure that occurs more than a week after a stroke does raise the question of possible epilepsy. Two more seizures post-stroke is definitely epilepsy.

Some types of strokes are more likely than others to produce seizures, such as bleeding in the brain or a traveling blood clot called an embolus that blocks a brain artery.

Epilepsy that follows a stroke sometimes can be delayed even months or years after the stroke. This may be because as circuits in the brain heal and reconnect over time, they become more

hyper-excitable, making the brain more prone to seizures. Importantly, a seizure does not mean that the person is having another stroke.



When epilepsy occurs later in life, it may stem from prior strokes, even very small ones of which the person is not aware. While scars from these small strokes may be visible on an MRI, there is no easy way to know which, if any, of the scars is causing the seizures.

Treatment of seizures caused by strokes is similar to treatment of any partial seizure. It usually involves antiepileptic medications. Of course, preventing a future stroke is also very important. More information can be obtained from your doctor or by searching the web for stroke prevention information. If you or someone you care about maybe having seizures or stroke symptoms, please contact a physician.