

BRAIN TUMORS

• *A GMC neurosurgeon clears up misconceptions about this complex subject*

→ Although we know popular medical drama TV shows like *Grey's Anatomy* don't reflect real life, how they portray brain tumors can lead to huge misconceptions.

To help set the record straight, Gwinnett Medical Center's Michael Stechison, MD, PhD, answers a few common questions. Dr. Stechison is not only one of the region's most respected neurosurgeons, but he has also been an educator and practitioner of neurosurgery since 1989 and is particularly known for his microsurgical treatment of brain tumors.

Q What are the symptoms of a brain tumor?

People who have benign tumors sometimes exhibit changes in their personality or behavior. Headaches can be common—but it is important to know that most people with headaches don't have a brain tumor. Headaches associated with brain tumors often are worse in the morning and frequently are associated with nausea and vomiting. Other symptoms are new onset of seizures; weakness in an arm, a leg or a side of the body; visual disturbance; or altered behavior. A rapidly growing

malignant (cancerous) tumor is more likely to produce symptoms. A slow-growing benign (noncancerous) tumor may have no symptoms and may be discovered incidentally on a brain scan done for another reason.

Q What causes brain tumors?

Each year in the U.S., approximately 20 per 100,000 people (0.02 percent) will develop a primary brain tumor, which is a tumor that begins in the brain. The DNA of a cell is damaged through a combination of mutation and inherited faulty genetic copy, and the cell begins to divide uncontrollably, reproducing itself and becoming unresponsive to signals telling it not to divide. Secondary (metastatic) brain tumors occur when cancer cells spread to the brain from a primary cancer elsewhere in the body.

Q What factors might increase the likelihood of developing a brain tumor—and is using a cellphone one of them?

Primary brain tumors have no proven environmental risk factors other than ionizing radiation. In the 1950s and '60s, radiation was used to treat "cradle cap," and this was observed to have an association 20 years later with tumors in the brain. But now the only use of ionizing radiation is to treat certain tumors. Having an occasional X-ray is low risk. Electromagnetic radiation (e.g., cellphones) is NOT a proven risk factor. Certain tumors that run in your family might put you at increased risk, as well.

Q Is a brain tumor always cancerous?

No. There are many types of benign tumors that can be cured with complete surgical removal. Some benign tumors, however, are in "malignant" locations that might not allow for complete removal with surgery. If all of the tumor can't be removed, it might



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be necessary to treat with stereotactic radiosurgery, a form of focused radiation performed by a radiation oncologist and a neurosurgeon.

Q My doctor told me that I have a brain tumor. What should I do next?

Some tumors require urgent surgery. Others can be scheduled when it's convenient for you. Based on the imaging report, your primary care physician can tell you if it is likely a benign tumor, a slow-growing lesion or a more serious tumor. Either way, it is important to make arrangements to see a neurosurgeon, preferably one with specific expertise in treating brain tumors. ■

WEBSITE



Atlanta's Brain Tumor Experts

At the Brain & Spine Institute, our neurosurgical team believes strongly in using conservative, non-surgical treatment when appropriate. For more information, visit thebrainandspineinstitute.com or call 678-312-2700.