

Brain tumor causes and risk factors elude scientists

July 25 2014

Today, nearly 700,000 people in the U.S. are living with a brain tumor, and yet, when it comes to pinpointing causes or risk factors, scientists are still searching for answers.

"Right now, we don't know who, we don't know when, and we don't know why people develop [brain tumors](#)," said Elizabeth M. Wilson, MNA, President and CEO, American Brain Tumor Association. "It's frustrating for the brain tumor community, and it's why the American Brain Tumor Association funds research to pursue answers to these questions, and it's why we host this national conference to provide answers families desperately seek."

At the American Brain Tumor Association (ABTA) annual Patient and Family Conference in Chicago, July 25-26, Jill Barnholtz-Sloan, PhD, Associate Professor, Case Comprehensive Cancer Center, Case Western Reserve University School of Medicine, will be the keynote speaker and provide an update on possible causes and risk factors for brain tumors.

As Dr. Barnholtz-Sloan explains, many environmental and [genetic risk factors](#) have been studied, but researchers have not uncovered a risk factor that accounts for a large number of brain tumors. "Unlike the strong correlation between smoking and lung cancer, we just haven't found a specific risk factor like that for brain tumors," said Dr. Barnholtz-Sloan. "We have determined that ionizing radiation to the head is a risk factor when received in therapeutic doses, but even in those cases, the risk of developing a brain tumor is low."

While this is the only known risk factor, Dr. Barnholtz-Sloan says, "I want to reassure people that their brain tumor or their child's tumor is not the result of anything we currently know about that they have been exposed to or done, including using cell phones."

Recent studies do not show proof there of an association between brain tumors and cell phone use among adults. With worldwide cellphone use increasing, researchers would Brain Tumor Causes and Risk Factors—page two expect a clear increase in brain tumor incidence over time, and studies show there is none.

Other unproven causes of brain tumors include: power lines, cigarette smoking, most forms of diagnostic ionizing radiation, head trauma, exposure to air pollutants, and alcohol consumption. Despite ruling out these and other environmental and genetic risk factors, researchers still don't know what factors may cause brain tumors.

Provided by Case Western Reserve University

Citation: Brain tumor causes and risk factors elude scientists (2014, July 25) retrieved 20 April 2024 from <https://medicalxpress.com/news/2014-07-brain-tumor-factors-elude-scientists.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--