No Link Seen Between Cell Phones, Brain Tumor

REUTERS HEALTH INFORMATION

By Amy Norton

NEW YORK (Reuters Health) Jul 14 - Studying more than 2.8 million Danish adults, researchers found that those who'd used a cell phone for 11 to 15 years were no more likely than newer users or non-users to develop an acoustic neuroma.

Acoustic neuromas, also known as vestibular schwannomas, are slow-growing tumors that form on the main nerve running from the inner ear to the brain. They can cause ringing in the ears, dizziness and balance problems; in a small number of cases, they can grow large enough to press against the brain and become life-threatening.

"Of interest is that acoustic neuromas grow in the area of the brain where greater energy emitted from the cell phones is absorbed, compared to other areas of the brain," explained Dr. Joachim Schuz, who is with the World Health Organization's International Agency for Research on Cancer (IARC) and led the new study.

So it might be expected that if cell phones were a cause of brain tumors, people who've used them for a long time might have an increased risk of acoustic neuroma -- especially on the side where they typically hold their phone.

But that wasn't the case, Dr. Schuz's team reported June 28th in the American Journal of Epidemiology.

Among the nearly three million Danish adults for whom they had data, just over 800 were diagnosed with acoustic neuroma between 1998 and 2006. And those who'd used cell phones the longest -- at least 11 years -- had no greater risk than shorter-term users or non-users.

On top of that, Dr. Schuz said in an email, there was no indication that long-term cell users had larger-than-expected tumors. Nor did they have a tendency to develop acoustic neuromas on the right side, where most held their phone.

Still, the findings are not the final word on cell phones and acoustic neuroma. One problem, according to Dr. Schuz, is that even long-term cell phone users had not been using their devices all that long. Acoustic neuromas generally grow slowly, and years may pass between a person's first symptoms and a diagnosis.

"As most cell phone users started their use only from the early 1990s onwards, we have only up to 15 years of observation time of larger numbers of users -- which is perhaps too short to see an effect, if there is any," he said.

Most studies on cell phones and brain tumors have failed to find an association, but some research has suggested there might be one. A large international study last year found that the heaviest cell phone users -- averaging 30 minutes a day for 10 years -- might have an increased risk of glioma.

And in May, the IARC released a report that classified the radiofrequency waves emitted from cell phones as "possibly carcinogenic" to humans -- based on what it called "limited evidence" of a link to glioma and acoustic neuroma.

The current study was considered in the IARC's review, Dr. Schuz said.

The problem with all of these studies is that they can only show -- or fail to show -- a correlation between cell phone use and brain tumors. They do not prove cause and effect. And many researchers believe that the radiofrequency waves from cell phones are not capable of causing tumors.

But since cell phones are now ubiquitous -- there are nearly 5 billion subscribers worldwide, according to the IARC -- experts generally agree that ongoing studies of any health risks from heavy, long-term use are needed.

And with "virtually everyone" being a cell phone user today, Dr. Schuz said, those studies will have to compare heavy daily users with less-intense users.

He noted, though, that even though people are spending more and more time on their phones, the "average output

power" of the phones appears to have gone down over time.

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