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Study links protracted cellphone use with tumors

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Tumors of the parotid (salivary) glands are significantly more common in people who use cellular phones over a relatively long period, according to a retrospective study of nearly 500 Israelis who contracted such benign or malignant growths compared to more than twice as many healthy controls. This is reportedly the first study of the possible effects of cellphone use by Israelis, who are known to utilize them for many minutes per day and start at young ages.

The study, led by Sheba Medical Center physician and Tel Aviv University epidemiologist Dr. Siegal Sadetzki, was announced late last week on the Web site Science Daily (www.sciencedaily.com) and published recently in the American Journal of Epidemiology.

Sadetzki, who has appeared several times at Knesset committees about the possible risk of cellular phone usage, said that while the results needed to be confirmed by additional and longer studies, in the meantime precautions should be taken.

These include limiting the use of cellphones by children and both kids and adults using earphones and other means to distance the cellphone from the head whenever possible.



Illustration. Photo: Bloomberg [file]

She conducted her study as part of the international Interphone Study, which aimed to discover if cellphone use and several kinds of brain and salivary gland tumors were linked.

Those who used a cellphone very frequently on the side of the head where the tumor developed were found to have an increased risk of about 50 percent for developing a tumor of the main salivary gland, compared to those who did not use cellphones, the study revealed. The parotid gland is located under the external ear about four to 10 millimeters under the skin.

Dr. Siegal Sadetzki, who owns and uses a cellphone, but sparingly, said that the fact that the study was done on an Israeli population is significant. Only a small minority of Israelis do not use cellphones, and those who do are likely to use them many more minutes than in other countries.

In Israel, where the cost is relatively inexpensive, there is a greater tendency to keep in touch due to familial closeness and security problems and nearly every part of the country has cellular antenna coverage.

Dr. Siegal Sadetzki explained: "Unlike people in other countries, Israelis were quick to adopt cellphone technology and have continued to be exceptionally heavy users. Therefore, the amount of exposure to radio-frequency radiation found in this study has been higher than in previous cellphone studies.

"This unique population has given us an indication that cellphone use is associated with cancer,"

added Sadetzki, whose team surveyed (by regular telephones) salivary tumor patients in hospitals around the country. The study's subjects were asked to detail their cellphone use patterns according to how frequently they used one, the average length of calls, and the side of the head the phone was next to. Their responses were then compared to a randomized sample of about 1,300 healthy control subjects.

The study also found an increased risk of cancer for heavy users who lived in rural areas, as cellphones in rural areas emit more radiation to communicate effectively because of longer distances between them and antennas.

Sadetzki predicted that, over time, the greatest effects would be found in heavy users and children. The lead researcher said that while the world was not willing to give up their cellular phones, precautions must be taken to reduce exposure and lower the risk for health hazards.

She recommended that people use hands-free devices at all times and when talking, hold the phone away from one's body. Less frequent calls, shorter in duration, should also have some protective effect. In addition, parents need to consider at what age their children start using them and insist that they use speakers or other hands-free devices.

"Some technology that we use today carries a risk. The question is not if we use it, but how we use it," she concluded.

