News :: 08/08/2005 - Mobile Phones could be damaging your eyesight

Summary:

Prolonged use of mobile phones can lead to permanent eye damage including cataracts, scientists believe.

Medical researchers have found that microwave radiation of the type emitted by mobile phones causes eye tissue to "bubble" - a precursor to the formation of cataracts - and can also interfere with the ability to focus.

The risk of permanent eye damage from mobile phone use has been revealed by radiation tests on calves' eyes.

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"Our results show that microwaves can cause irreparable damage. Our advice to people with mobile phones is not to use them if they have the option of using a land line until we can conduct more research."
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Professor Levi Schächter
Rappaport Faculty of Medicine at the Israel Institute of Technology, Haifa

The new findings will reignite the debate into the safety of mobile phones, after warnings from public health minister Rosie Winterton earlier this year that parents should be "very careful" about how much time children spend talking on their handsets. More than 50 million mobiles are in use in Britain.

The new study, conducted by the Rappaport Faculty of Medicine at the Israel Institute of Technology, in Haifa, found clear risk to eyesight.

Scientists exposed lenses taken from male calves - whose eyes, until they are two years old, have close similarities to humans' - to mild heat, comparable to the raised temperature caused by extended mobile phone use, and to microwave radiation no greater than emissions from mobile phones. After two weeks the lenses, kept in a culture medium, were compared with others which had not been similarly exposed, to identify biological changes.

Prof Schächter's team found that the exposed lenses were less able to focus clearly on a beam of light, which would cause an eye to record a blurred image - but found that over time, when exposure stopped, the damage healed.

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"There has been much research to determine whether mobile phones cause cancer or brain damage, but until now very little on their effects on vision."
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Shortly after the study was published in the Journal of Bioelectromagnetics the authors were invited to present their findings to the Israeli parliamentary health committee. The country's health advisory body subsequently urged the Israeli government to fund more such studies.

Last year a major review by the highly conservative International Commission for Non-Ionising Radiation (ICNIRP) of all published research yet again concluded that there was "no consistent or convincing evidence of a causal relation" between mobile phone use and any adverse health effects. There is strong accepted evidence however of cataracts being caused by high energy microwave radiation sources such as radar.

However, the new findings has provoked consternation in Britain. Dr Michael Clark, a spokesman for the Health Protection Agency, said British researchers should broaden the range of possible dangers being investigated.

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"This is a good piece of work that is properly published and we are looking at it carefully. If
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Could this be another potential time-bomb for our children to walk into? If the evidence here applies equally to genuine mobile phone radiation and human eyes (which the researchers imply and believe that it is likely to) could we be handing the next generation permanently damaged eyesight? Until further research is done Powerwatch recommends that children spend as little time as possible using their mobile phone for calling friends when texting seems to be a viable and safer alternative.