

Laptop Wi-Fi Said to Nuke Sperm, but Caveats Abound

By Frederik Joelving

NEW YORK (Reuters Health) Nov 28 - The digital age has left men's nether parts in a squeeze, if you believe the latest science on semen, laptops and wireless connections.

In a paper November 23rd in *Fertility and Sterility*, Argentinian scientists report that they obtained semen samples from 29 healthy men, placed a few drops under a laptop connected to the Internet via Wi-Fi and then hit download. Four hours later, the semen was, eh, well-done.

A quarter of the sperm were no longer swimming around, for instance, compared to just 14% of sperm in samples stored at the same temperature but away from the computer.

And 9% percent of the Wi-Fi exposed sperm showed DNA fragmentation, three-fold more than the comparison samples.

The culprit? Electromagnetic radiation generated during wireless communication, according to Conrado Avendano of Nascentis Medicina Reproductiva in Cordoba and colleagues.

"Our data suggest that the use of a laptop computer wirelessly connected to the internet and positioned near the male reproductive organs may decrease human sperm quality," they write in their report.

"At present we do not know whether this effect is induced by all laptop computers connected by Wi-Fi to the internet or what use conditions heighten this effect."

A separate test with a laptop that was on, but not wirelessly connected, found negligible electromagnetic radiation from the machine alone. The findings fuel concerns raised by a few other research teams. Some have found that radiation from cell phones impairs sperm motility in the lab, for example. And last year urologists described how sitting with a laptop balanced on the knees can raise scrotal temperatures to levels that aren't good for sperm. (See Reuters Health story of November 8, 2010, at <http://reut.rs/gHmXpC>.)

But the impact of the heat and the radiation from today's electronic devices is not at all clear, said Dr. Robert Oates, who has managed to father two kids despite having both a laptop and an iPad.

The president of the Society for Male Reproduction and Urology, Dr. Oates told Reuters Health he doesn't believe laptops are a significant threat to male reproductive health.

"This is not real-life biology, this is a completely artificial setting," he said about the new study. "It is scientifically interesting, but to me it doesn't have any human biological relevance."

He added that so far, no study has ever looked at whether laptop use has any influence on fertility or pregnancy outcomes.

"Suddenly all of this angst is created for real-life actual persons that doesn't have to be," said Dr. Oates, also of Boston Medical Center. Also, he mused, "I don't know how many people use laptops on their laps anyway."

SOURCE: <http://bit.ly/u7jpxF>

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