

[Bull Environ Contam Toxicol](#). 2009 Oct 9. [Epub ahead of print]

## **Preliminary Study on the Induction of Sperm Head Abnormalities in Mice, *Mus musculus*, Exposed to Radiofrequency Radiations from Global System for Mobile Communication Base Stations.**

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The exposure of male mice to radiofrequency radiations from mobile phone (GSM) base stations at a workplace complex and residential quarters caused 39.78 and 46.03%, respectively, in sperm head abnormalities compared to 2.13% in control group. Statistical analysis of sperm head abnormality score showed that there was a significant ( $p < 0.05$ ) difference in occurrence of sperm head abnormalities in test animals. The major abnormalities observed were knobbed hook, pin-head and banana-shaped sperm head. The occurrence of the sperm head abnormalities was also found to be dose dependent. The implications of the observed increase occurrence of sperm head abnormalities on the reproductive health of humans living in close proximity to GSM base stations were discussed.

*Ph. Hug remark :*

*In the full paper, exposures values are :*

**Table 1** Results of sperm head abnormality in mice exposed to radiofrequency radiations from GSM base stations

Location	Mean RF radiation (mV/m) $\pm$ SD	Mean sperm-head abnormality $\pm$ SD	% <sup>a</sup>
Control	59 $\pm$ 17	10 $\pm$ 5	2.13
Workplace complex	489 $\pm$ 43	350 $\pm$ 25	39.78*
Residential quarters	625 $\pm$ 25	230 $\pm$ 35	46.03*

SD standard deviation

\* Significantly higher ( $p < 0.05$ ) than control

<sup>a</sup> The percentages are the means for groups of five mice for each location