Mexicans Link Down's Syndrome to Higher Risk of Leukemia

December 21, 2006

It's long been known that children with Down's syndrome have a much greater chance of developing acute leukemia —up to 20 times greater or even higher. Now, in the first study of its kind, a group of Mexican researchers have shown that Down's children exposed to magnetic fields of 6 mG (0.6 μT) or more had close to four times the risk of developing acute leukemia compared to other Down's children. (The analysis was based on spot measurements, rather than the more commonly used 24-hour readings.) Writing in the January 2007 issue of *Epidemiology*, Juan Mejia-Arangure and coworkers conclude that genetic susceptibility to leukemia may well modify the effects of EMFs.

This is only the latest indication that genetics plays a role in susceptibility to EMFs. Germany's Wolfgang Löscher was one of the first in a groundbreaking study of EMF-induced breast cancer in rats. The new Mexican study is the kind of work recommended by Martin Röösli and Nino Künzli in their commentary, published earlier this year, on how to make progress on understanding the link between EMFs and childhood leukemia. "[I]t's unlikely that all children are equally susceptible to EMF and interactions between genetic factors could be relevant," they wrote.

The Mexican approach is clearly more productive than industry's standard refrain that the EMF epidemiological studies are all tainted by some type of systematic bias or that some as-yet unrecognized "factor X" is responsible. It's time to leave these tired arguments behind and to start putting more genetics into the mix.

Mexico, ELF EMFs, Down's Syndrome, childhood leukemia, Martin Röösli, genetic susceptibility,

© Copyright Microwave News 2003-2026. All Rights Reserved.