

X-Chromosome gene variant linked to SIDS in boys

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Noting that the X-chromosomal monoamine oxidase A (*MAOA*) gene is important in both the serotonergic and noradrenergic neuronal systems, Michael Klintschar, M.D., from Medical University Hannover, and Christian Heimbold, from Georg August University Göttingen -- both in Germany, examined the frequency of functional polymorphism in the promoter of the *MAOA* gene in 156 white SIDS cases and 260 gender-



and age-matched controls.

The researchers found that the pooled low-expressing alleles *2 and *3 were present in 44.4 percent of male SIDS cases but only 25.5 percent of male control cases. In contrast, there were no differences for females. These alleles were more frequent in infants who died at ages of 46 to 154 days than those who died at an older age (54.9 versus 22.6 percent).

"Our results indicate a relationship between SIDS and the *MAOA* genotype in boys via influencing serotonergic and noradrenergic neurons in the brainstem," the authors conclude. "This locus is the first X-chromosomal locus associated with SIDS."

More information: <u>Abstract</u>

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