Medical Xpress

Antipsychotics induce insulin resistance without weight gain

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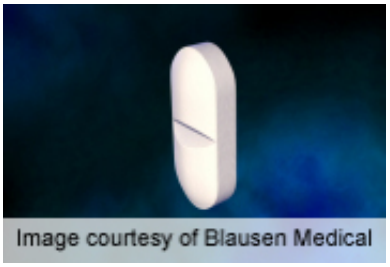

Atypical antipsychotic drugs induce insulin resistance even in the absence of weight gain and mechanisms regulating eating behavior, according to a study published online July 8 in *Diabetes*.

(HealthDay)—Atypical antipsychotic drugs induce insulin resistance even in the absence of weight gain and mechanisms regulating eating behavior, according to a study published online July 8 in *Diabetes*.

To examine whether atypical antipsychotic drugs have detrimental metabolic effects independent of weight gain or psychiatric disease, Karen L. Teff, Ph.D., from the Monell Chemical Senses Center in Philadelphia, and colleagues treated healthy people as inpatients in a controlled setting with olanzapine, aripiprazole, or placebo for nine days (10 people per group) while maintaining activity levels.

The researchers found that, compared with placebo, olanzapine (which has been strongly associated with weight gain) treatment was associated

with significant increases in postprandial insulin, glucagon-like peptide 1, and glucagon, as well as insulin resistance. In contrast, aripiprazole (which has been considered metabolically sparing) had no effect on postprandial hormones but also induced insulin resistance. The changes occurred without weight gain, increase in food intake and hunger, or psychiatric disease.

"Our findings suggest that interventions inhibiting weight gain in atypical antipsychotic-treated patients may be only partially effective in preventing metabolic disease since the drugs are exerting direct effects on tissue function," Teff and colleagues conclude.

More information: Abstract
Full Text (subscription or payment may be required)