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GROWTH OF YOUNG MONKEYS GIVEN THE ATYPICAL ANTIPSYCHOTIC DRUGS RISPERIDONE AND QUETIAPINE

G.P. Sackett, B. Crouthamel

University of Washington, National Primate Research Center and Center on Human Development and Disability, Seattle, Washington, USA

Presenter's Email: jsackett@wanprc.org

Atypical neuroleptic drugs are prescribed to young children for a number of abnormal behavior symptoms. Some of these drugs are given "off label" – no government approval for use with children. Effects of many of these drugs on the growth of young children have received little or no experimental study. We studied the effects of low and high doses of two atypical drugs, risperidone (.025 and .05 mg/ml doses) and quetiapine (2 and 4 mg/ml). We measured the growth (body weight, skeletal sizes, bone density) and prolactin and thyroxin levels of 40 9-24 month old pigtail monkeys (*M. nemestrina*). The research was designed to model growth by 4-8 year old children. Compared with placebo, neither drug had detrimental effects on body weight or skeletal dimensions. Growth hormone levels did not differ between groups. However, bone density was lower following low dose risperidone than either quetiapine or placebo. Very high prolactin levels in the risperidone group may explain this effect. We conclude that both drugs appear to be safe for growth by young primates. However, risperidone needs to be studied further for bone density effects in young children. Supported by NIH grants Mho64647, RR00166, and HD02774.

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