

Society for Endocrinology media release



Embargoed until 20:00 BST, Monday 19 September 2011

Society for Endocrinology response to study in *PNAS* on the effects of methylphenidate on puberty in male rhesus monkeys

Professor Richard Sharpe, Society for Endocrinology spokesperson and Group Leader at the MRC Centre for Reproductive Health said:

“Methylphenidate, also known as Ritalin, is one of the most widely prescribed drugs to school-age/adolescent children, in particular to boys. It is highly effective in controlling attention deficit/hyperactivity and related behaviours that can be highly disruptive.

“This study in male rhesus monkeys, which exhibit similar pubertal development to boys, found that chronic administration of methylphenidate delayed pubertal development and the associated increase in testosterone levels; it also delayed descent of the testes into the scrotum. These effects most probably resulted from a central (brain) effect on centres that hormonally control puberty.

“These results suggest that similar effects on onset of puberty are likely in boys if they are treated with methylphenidate in the years leading up to puberty (10-13 years), which is common. Delayed puberty in treated girls might also be anticipated, as similar mechanisms underlie puberty in girls and boys. Earlier studies in rats support both of these conclusions.

“On the positive side, the treatment effects on puberty were fully recoverable, lessening chances of any permanent adverse effects if treatment delays puberty in boys. Also the effect on testis descent is not relevant to boys in whom the testes are normally descended before birth, unlike in rhesus monkeys in which this is delayed until puberty.”

-----Ends-----

Notes to editors

For more information, contact the Society for Endocrinology press office:

Jennie Evans

Tel: +44 (0)1454 642 230

Mob: +44 (0)7773 797 501

Email: jennie.evans@endocrinology.org

Toby Stead

Tel: +44 (0)1454 642 252

Email: toby.stead@endocrinology.org

The full paper this statement is in response to can be found at: Mattison et al. Pubertal delay in male nonhuman primates (*Macaca mulatta*) treated with methylphenidate. *PNAS*, doi: [10.1073/pnas.1102187108](https://doi.org/10.1073/pnas.1102187108)

The **Society for Endocrinology** is Britain's national organisation promoting endocrinology and hormone awareness. For general information, please visit our website: <http://www.endocrinology.org>. For more information on hormones, visit our public information website, **You & Your Hormones**: www.yourhormones.info