

A simple solution could end the misery of PMS

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Premenstrual syndrome causes misery for millions of women worldwide every month, and whilst not all women show all the symptoms, it has been estimated that 75 per cent of women experience some effects. In 30-40 per cent of cases, these effects are sufficiently severe to impair daily activities, with knock on effects for family and friends.

However, Neuroscientists at the University of Birmingham are working on a revolutionary approach which might end the scourge of PMS after identifying, for the first time, an organic cause for the condition.

In laboratory trials, researchers led by Dr Thelma Lovick have shown that symptoms consistent with PMS can be triggered in female rats by a change in the level of one of the female sex hormones that normally occurs towards the end of the menstrual cycle in women. The Birmingham results suggest that the PMS symptoms could be prevented by giving low doses of the commonly prescribed anti-anxiety drug fluoxetine (Prozac).

Dr Lovick and her team believe that if affected women were to take a very low dose of fluoxetine, around one tenth of the standard strength of the drug most commonly prescribed, for just a few days during the premenstrual period, they should avoid developing the negative physical and emotional symptoms that characterise the syndrome.

'Excitingly, fluoxetine completely prevented the development of the signs of anxiety and increased pain and sensitivity normally shown by female rats in late dioestrus, their version of the premenstrual period. Moreover, it completely changed the way in which the brain circuits responded to anxiety-inducing stress,' she says.

'All that would be needed for countless women to benefit from what could be a simple and accessible treatment, involving a drug that is already in widespread use, is clinical tests to refine it and identify the optimal dosing strategy,' she says. The team is now seeking a clinical partner to confirm their laboratory findings and fund a clinical trial.

Dr Lovick concludes: 'The time is right for a controlled clinical trial in women. The solution to PMS for many women could be as simple as taking a pill for a few days towards the ends of your menstrual cycle.'

[PMS press release. \(/news/latest/2010/09/17sept-PMS.aspx\)](#)



Neuroscientists at the University are working on a revolutionary approach to combat PMS.