

Immune system 'stops conception'

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Men could one day use a contraceptive which uses the body's immune system to prevent conception, say researchers.

Scientists from the University of North Carolina immunised male monkeys with a protein found in the testes which made them infertile. They say the process, detailed in the journal *Science*, is reversible. UK experts said the field of immunocontraception was interesting - but it was difficult to create methods which were universally effective. Previous research into the area has focussed on triggering the immune system to respond to hormones.

*Pairings *

In the study, nine male monkeys were treated with a solution containing the Eppin protein. The protein is a suitable candidate for immunocontraception treatment because it is only found in the testes, meaning other areas of the body would not be affected. The protein interacts with a substance which is involved in the coagulation of semen. Seven developed strong antibody responses to the protein and became infertile. The researchers suggest the anti-Eppin antibodies interact with a substance involved in this process. Five of the monkeys regained their fertility after treatment stopped.

Professor Jonathan Millar, director of the Medical Research Council's Human Reproductive Sciences Unit, said the discovery that an Eppin-based treatment could be effective was significant. He said: "There have been concerns in such methods have to raise antibodies that are very specific. This looks like it's unlikely to have deleterious effects in other areas of the body." He added: "Importantly, it does seem that it is reversible. Seventy-one per cent of the monkeys recovered fertility within a year of stopping treatment." But he said: "Immunocontraceptive processes are tricky because we don't always get 100% effectiveness. In this study, some of the animals just didn't raise antibodies."

<http://news.bbc.co.uk/go/pr/fr/-/2/hi/health/4003781.stm>