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Cure for drug addiction found

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Australian scientists find cure for heroin, morphine addiction



Singapore: A team of researchers from the University of Adelaide and a team from the University of Colorado Boulder have found, for the first time, that blocking an immune receptor called TLR4, stopped opioid cravings. The findings were published this week in the Journal of Neuroscience.

Dr Mark Hutchinson, University of Adelaide, said that, "Both the central nervous system and the immune system play important roles in creating addiction, but our studies have shown we only need to block the immune response in the brain to prevent cravings for opioid drugs."

The drug has been proven to work in the laboratory and is being developed by the National Institutes on Drug Abuse, US, to test in clinical trials. Dr Hutchinson feels that the clinical trials on patients could be underway within as early as three years. If the clinical trials were successful, opioid drugs used to treat acute pain could potentially be co-formulated with the additional drugs to limit the chance of addiction.

This approach could also treat patients with heroin or other opioid addictions, who are admitted to hospital and require pain relief. These patients generally needed larger doses of drugs like morphine to treat pain because their bodies have developed a higher tolerance.

However, Dr Hutchinson said that the patients could be given lower doses as the drugs are co-formulated. "It might make it much easier to treat those already addicted or tolerant populations," he said.