**Common antibiotic could treat PTSD**

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A common antibiotic called doxycycline can disrupt the formation of negative thoughts and fears in the brain and may prove useful in treating or preventing post traumatic stress disorder (PTSD), according to research by British and Swiss scientists.

In a specially designed trial involving 76 healthy volunteers who were given either the drug or a placebo dummy pill, those who were on doxycycline had a 60 per cent lower fear response than those who were not.

Scientists said the antibiotic works in this way because it blocks certain proteins outside nerve cells, called matrix enzymes, which our brains need to form memories.

"We have demonstrated a proof-of-principle for an entirely new treatment strategy for PTSD," said Dominik Bach, a professor at University College London and the University of Zurich, who co-led the research team.

PTSD is caused by an overactive fear memory and includes a broad range of psychological symptoms that can develop after someone goes through a traumatic event.

Bach said he and his team would now like to explore doxycycline’s potential effects further, including in a phenomenon called "reconsolidation" of fear memories – an approach to helping people with PTSD – in which memories and associations can be changed after an event when the patient experiences or imagines similar situations