

Spinal cord treatment offers hope

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Dr Ben Goss is part of a research team developing a new way to treat spinal cord injuries.

Queensland University of Technology (QUT) researchers have developed a promising new treatment for spinal cord injury in animals, which could eventually prevent paralysis in thousands of people worldwide every year.

Dr Ben Goss, from the Institute for Health and Biomedical Innovation (IHBI) at QUT, is part of a research team investigating how to prevent the spinal cord from degenerating after an injury.

"The initial injury to the spinal cord is much like a bruise," he said.

"However, unlike ordinary bruises the spinal cord has a persistent [inflammatory response](#) that leads to further damage.

"Our research is looking at the effects of adding proteins, also known as growth factors, to the spinal cord to reduce or switch off the inflammation and prevent secondary [neurological damage](#)."

The treatment, which combined vascular endothelial and platelet-derived proteins, was applied to animals immediately after a spinal cord injury and evaluated after one and three month periods.

Dr Goss said researchers, including from Griffith University, found the size of the lesion caused by the spinal cord injury was significantly smaller in the treated group compared to animals that did not receive treatment.

He said there was also significantly less damage to tissue around the spinal cord injury after the new treatment.

"This study has demonstrated for the first time a treatment can reduce or eliminate secondary degeneration after [traumatic injury](#) to the spinal cord," Dr Goss said.

"At present spinal cord injury is permanent and irreversible, but I believe our research has the potential to improve outcomes and this might be the first step to achieving a cure."

The research, published in the *Journal of Neurotrauma*, could help 30,000 people worldwide, including about 400 Australians, who sustain [spinal cord injuries](#) every year.

About 9000 Australians live with disabilities caused by [spinal cord damage](#), with [road accidents](#) causing nearly half of such injuries in Australia.

Dr Goss said The Walk Again Society, which funds spinal cord injury

research, is raising money to support the project, which is eventually hoped to include clinical trials.

Provided by Queensland University of Technology

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