

Back pain putting people off balance

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A Murdoch PhD candidate has demonstrated a direct link between back pain and its affect on a person's balance.

Chiropractor Alex Ruhe said that there was already a known correlation between back pain and bad [balance](#), but this is the first time a linear relationship has been demonstrated.

"Our research shows that sufferers of neck, mid-back and low-back pain sway significantly more than healthy individuals," Mr Ruhe said.

"The more intensive a person's pain, the more sway is observed in the patient."

"We found that if pain is reduced, in our case following therapeutic interventions, the sway is reduced as well," Mr Ruhe said.

It appears that pain signals interfere with the nervous system that is controlling the muscles and this can be reversed fairly rapidly as pain decreases.

"Long term damage or changes to the nervous system due to the pain appears unlikely as reduced sway in association with pain reduction was observed after just a few days," he said.

"If there had been long term damage a healing process for the nerves would have been required - which would have taken more than just a few days."

Postural sway was measured with the use of a foreplate - a solid plate with pressure receptors in each corner that record weight shifts. Data was collected from 70 healthy individuals and then compared to 210 patients suffering from neck, mid-back and low back pain.

"This research marks an important finding for clinicians. It serves as an objective monitoring tool for patients suffering from [back pain](#) under treatment and rehabilitation," Mr Ruhe said.

This research may also be of relevance to the elderly. Elderly people who have problems with balance are more likely to fall. Therefore it may be safe to assume that those with an additional instability due to pain may be even more prone to get injured.

"Reducing pain in elderly patients should be given preference to any balance rehabilitation, at least to begin with," Mr Ruhe said.

Provided by Murdoch University

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