LOW PAIN CATASTROPHIZATION AND DISABILITY PREDICT SUCCESSFUL OUTCOME TO RADIOFREQUENCY NEUROTOMY IN INDIVIDUALS WITH CRONIC WHIPLASH

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What was the study about?
The physical and psychological symptoms of whiplash-associated disorders (WAD) have been treated successfully in some cases, with a medical procedure known as cervical radiofrequency neurotomy (cRFN). cRFN is a procedural technique that uses heat generated by radio waves to disrupt nerve pathways associated with pain arising from the underlying neck bones. Not all patients respond to this treatment. This study investigates if any WAD symptoms could be identified as predictors of successful cRFN outcomes.

What did the study find?
The study found that successful cRFN treatments at three months could be predicted using two models. Low scores on either the Neck Disability Index (NDI) or the Pain Catastrophizing Scale (PCS) indicated a greater likelihood of success for cRFN treatment. Other clinical features used in the study, such as Pressure Pain Thresholds (PPT), Cold Pain Thresholds (CPT) and Post-Traumatic Stress symptoms (PTS) did not predict either a successful or unsuccessful treatment response.

Why is this interesting or important?
This study supports previous studies that shows cRFN to be an effective treatment for chronic pain in some people suffering from whiplash-associated injuries. Importantly, the study indicates that clinical features associated with WAD do not predict failure of response to cRFN, with patients showing a certain range of WAD symptoms having a higher possibility of reporting a successful outcome.

How was the study done?
Fifty-three people with WAD participated in the cRFN study. Questionnaires relating to WAD symptoms were answered before cRFN treatments, at one month post treatment and at three months post treatment. Answers were graded on a Global Rating of Change (GROC) scale. Questionnaire topics included self reported pain (VAS), disability (NDI), post-traumatic stress symptoms (PDS), pain catastrophizing (PCS), and pressure and cold pain thresholds. A rating of +4 or higher on the GROC scale at three months was considered a success.

What does this mean for practice?
In terms of practice, cRFN procedure has demonstrated the ability to reduce chronic pain in some patients with whiplash-associated disorders. This study shows that certain people with low levels of whiplash symptoms in NDI and PCS models have a significant chance of gaining long-term benefit from the cRFN procedure. This gives sufferers of WAD another potential option for treating their pain and managing their recovery.