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**BBC**

**Crossing your arms 'relieves hand pain'**

Crossing your arms across your body after injury to the hand could relieve pain, researchers suggest.

The University College London team, who undertook a proof-of-concept study of 20 people, say the brain gets confused over where pain has occurred.

In the journal Pain, they suggest this is because putting hands on the "wrong" sides disrupts sensory perception.

Pain experts say finding ways of confusing the brain is the focus of many studies.

The team used a laser to generate a four millisecond pin-prick of pain to participants' hands, without touching them.

Each person ranked the intensity of the pain they felt, and their electrical brain responses were also measured using electroencephalography (EEG).

The results from both participants' reports and the EEG showed that the perception of pain was weaker when the arms were crossed over the "midline" - an imaginary line running vertically down the centre of the body.

Activation

Dr Giandomenico Iannetti, from the UCL department of physiology, pharmacology and neuroscience, who led the research, said: "In everyday life you mostly use your left hand to touch things on the left side of the world, and your right hand for the right side of the world.

"This means that the areas of the brain that contain the map of the right body and the map of right external space are usually activated together, leading to highly effective processing of sensory stimuli.

"When you cross your arms these maps are not activated together anymore, leading to less effective brain processing of sensory stimuli, including pain, being perceived as weaker."

He said the discovery could potentially lead to new ways of treating pain that exploit this confusion.

Dr Iannetti he added: "Perhaps when we get hurt, we should not only 'rub it better' but also cross our arms."

His team, alongside Australian researchers, are now testing the theory on patients who have chronic pain conditions.

A spokesman for the Pain Relief Foundation said a lot of research into relieving chronic pain was looking into ways of confusing the brain and disrupting pain messages.