Study Sheds Light on How Fibromyalgia Works

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The Difference in Fibromyalgia Patients' Brains

Fibromyalgia patients’ brains react differently to stimulation than healthy people’s brains, new research has revealed, providing insight into how fibromyalgia works.

The study, which came out of the Department of Psychology and Neuroscience at the University of Colorado Boulder, looked at brain scans of people with and without fibromyalgia as they were shown sights and sounds healthy people would consider non-painful.

The participants were placed in an imaging machine so that researchers could view their brain activity. They were then shown colors, played tones, and asked to do simple motor tasks. In the fibromyalgia patients the brain’s cortex, which is responsible for processing visual, auditory, and motor signals, was not activated like it should have been. However, other brain regions were activated that are not relevant for primary processing, and were not activated in the healthy study participants.

Implications

This suggests that fibromyalgia may be related to the brain’s greater processing of pain-related signals and misprocessing of other types of non-painful sensory signals. This has been likened to a volume control, where the volume (or pain) is turned way up in people with the condition.

What Next?

Future research will aim to improve the understanding of where in the brain the problems that seem to cause fibromyalgia are, which will hopefully lead to the development of new treatments. A treatment targeted at desensitizing the response in the over-reactive part of the brain is something that can be studied.