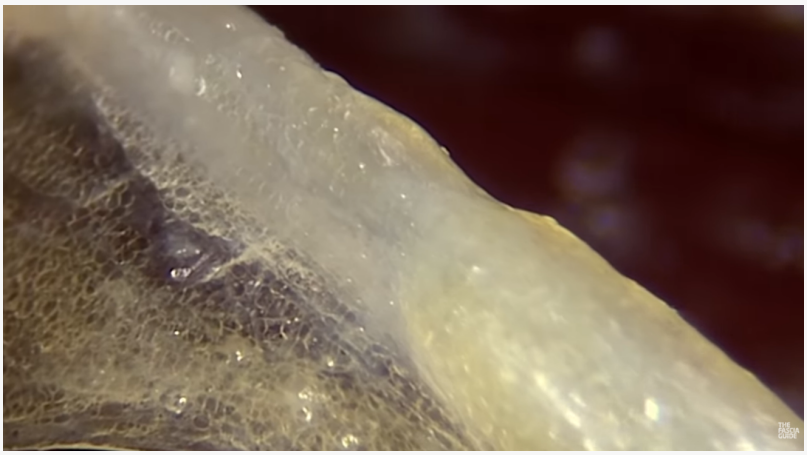
Pain No Scan Explains Is Not Imagined. Research Finds Physical Differences in Fascia

Research using ultrasound and PET imaging identifies measurable physical correlates of chronic pain in fascia, a connective tissue long overlooked by anatomy.



Living fascia recorded during endoscopic surgery by French surgeon Jean-Claude Guimberteau. The image appears in the documentary The Living Body: It's time to talk about Fascia.

NY, UNITED STATES, July 7, 2026 /EINPresswire.com/ -- Many people live with long-term pain in their muscles and joints that no X-ray or MRI can explain. Many patients report being told the problem is psychological or that no physical cause can be found. But a growing body of research shows there are measurable, physical correlates of that pain in the fascia, the body's connective tissue network. For many, not being believed becomes part of the burden, adding to the pain itself.

> The absence of an explanation does not mean the pain is not real."
>
> *Hans Bohlin, Life Force Innovation*

Researchers have begun to find such correlates in specific conditions. In a study of 121 people, the ability of the lower-back fascia to glide – its shear strain – was around 20 percent lower in those with chronic low back pain than in those without (Langevin et al., 2011). That is a measurable, physical difference, recorded with ultrasound. In a Swedish PET study at Uppsala University, people with persistent symptoms after whiplash showed objectively elevated markers of inflammation in the neck compared with healthy controls (Linnman et al., 2011), a sign that painful processes in the body's periphery can in fact be imaged. Fascia is also innervated and contains pain-sensing nerve endings, something shown, for example, in animal studies (Mense & Hoheisel, 2016).

The absence of a described mechanism does not mean the pain is not real. It means we have not yet seen where it comes from.

This is a growing field of research, not a settled scientific consensus. The findings are physical correlates and early evidence, not finished explanations, and not proof of any treatment. But they point in a clear direction: that pain does not show on a scan does not mean it lacks a physical reality. As imaging methods such as ultrasound and PET begin to make some of these tissue changes visible, what has long been treated as merely subjective is increasingly something that can be measured.

Life Force Innovation is a Swedish non-profit foundation that supports research and public knowledge about fascia and its role in health.

That raises an important question: why is pain that leaves no visible finding on routine imaging still so often regarded as lacking a physical explanation, when the tissue it may arise from was itself long overlooked by anatomy?

About Life Force Innovation
Life Force Innovation is a Swedish non-profit foundation working to advance research and knowledge about fascia and its role in health. The foundation is an independent voice.

Scientific Sources
Langevin HM et al. Reduced thoracolumbar fascia shear strain in human chronic low back pain. BMC Musculoskeletal Disorders (2011). DOI: 10.1186/1471-2474-12-203
Linnman C et al. Elevated [11C]-D-Deprenyl Uptake in Chronic Whiplash Associated Disorder Suggests Persistent Musculoskeletal Inflammation. PLoS ONE (2011). DOI: 10.1371/journal.pone.0019182
Mense S, Hoheisel U. Evidence for the existence of nociceptors in rat thoracolumbar fascia. Journal of Bodywork & Movement Therapies (2016). DOI: 10.1016/j.jbmt.2016.01.006

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