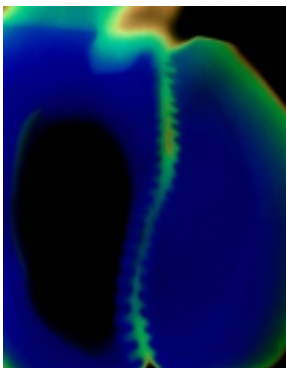


# Blood markers may reveal active spinal degenerative disease

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(HealthDay)—Serum biomarkers may be a measure for assessment of active degenerative spinal disease in older adults, according to a study published in the November issue of the *Journal of the American Geriatrics Society*.

In a cohort of patients, Gwendolyn A. Sowa, M.D., Ph.D., from the Veterans Affairs Pittsburgh Healthcare System, and colleagues measured pain-related impairment (on a pain thermometer and the McGill Pain Questionnaire Short Form) and pain-related function or activity limitation (Roland Morris Disability Questionnaire, Short Physical Performance Battery, and repetitive trunk rotation). Magnetic resonance imaging (MRI) scans were performed and [plasma samples](#) were collected before and after [physical performance](#) tests. Plasma samples

were analyzed for inflammatory markers (E-selectin and regulated on activation, normal T cell expressed and secreted [RANTES]), inhibitors of catabolic enzymes (tissue inhibitor of metalloproteinases-1), markers of matrix turnover (C- telopeptide of type II collagen and aggrecan chondroitin sulfate 846), and stress biomarkers (neuropeptide Y [NPY]). The cohort included 43 older individuals ( $\geq 60$  years) with chronic low back pain.

The researchers found that composite MRI measurements did not show significant correlation with pain or pain-related function. There were associations noted with pain and pain-related function with basal levels and changes in serum biomarkers in response to activity, particularly NPY and RANTES, in addition to the explanatory power of MRI-based results.

"Changing levels of biomarkers in response to activity suggests that they may be useful as metrics to measure treatment responses in future studies," the authors write.

**More information:** [Abstract](#)  
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