

# Polymorphism in estrogen receptor alpha linked to back pain

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For women with degenerative spondylolisthesis, polymorphisms in the estrogen receptor  $\alpha$  (ER $\alpha$ ) are associated with back pain intensity, according to a study published in the April issue of the *Journal of Spinal Disorders and Techniques*.

(HealthDay)—For women with degenerative spondylolisthesis (DS), polymorphisms in the estrogen receptor  $\alpha$  (ER $\alpha$ ) are associated with back pain intensity, according to a study published in the April issue of the *Journal of Spinal Disorders and Techniques*.

Hyoung Lok Roh, M.D., from Pusan National University School of Medicine in the Republic of Korea, and colleagues examined the correlation between polymorphisms in the ER $\alpha$  and pain intensity in female DS patients. Data were collected for 192 patients with DS for *PvuII* and *XbaI* polymorphisms, [bone mineral density](#), pain intensity at the leg and lower back, and radiological and anthropometric findings.

The researchers found that the *XbaI* polymorphism was significantly correlated with the visual analog scale score of back pain, with the visual analog scale significantly higher in patients with GG genotype compared with the AG or AA genotypes. In haplotype analyses of the *PvuII* and *XbaI* polymorphisms, the presence of the CG haplotype correlated with the intensity of back pain.

"We found ER $\alpha$  gene polymorphism using *XbaI* [restriction enzyme](#) to be associated with back [pain intensity](#) in DS patients," the authors write. "However, further studies on a larger number of subjects will be needed."

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