A new study published in the Journal of Orthopaedic Research indicates that certain genetic changes are linked with an increased risk of developing lumbar spinal stenosis, a narrowing of the open spaces in the lower spine that can lead to pain in the legs when individuals walk.

The results from the study, which included 469 individuals, provide insights into the potential causes of spinal stenosis. "Our study represents a tremendous leap forward in our understanding of the condition," said senior author Dr. Dino Samartzis. "With a better understanding of the condition and the identification of genetic markers, individuals who are at increased risk can be identified early and preventative measures can be initiated. The information may also help investigators develop more novel and precision-based management options for affected patients."

Lead author Dr. Jason Cheung added, "We finally have a clearer understanding regarding the genetic and developmental background of spinal canal narrowing. The bony spinal canal diameter is a unique phenotype that should not be mistaken for a canal measurement at the level of the disc, where it is highly influenced by disc degeneration features."


About Journal

The Journal of Orthopaedic Research, a publication of the Orthopaedic Research Society (ORS), is the forum for the rapid publication of high quality reports of new information on the full spectrum of orthopaedic research, including life sciences, engineering, translational, and clinical studies.