

Moderate weight loss helps reduce risk of osteoarthritis in the knee

19 October 2009

(PhysOrg.com) -- Here's another good reason to lose even a moderate amount of weight: it could reduce your risk of developing osteoarthritis in your knees.

People who are overweight and lose just 5 percent of their weight are less likely to develop [osteoarthritis](#) of the knee, or knee OA, compared to people who gain weight, according to data from a large ongoing study by the Thurston Arthritis Research Center at the University of North Carolina at Chapel Hill School of Medicine.

"We hear a lot of messages about how obesity affects cardiovascular disease and diabetes, but arthritis is often overlooked," says Lauren Abbate, a third-year medical student at UNC and lead investigator of the knee OA paper, presented Monday, Oct. 19, 2009, at the American College of Rheumatology scientific meeting in Philadelphia.

"OA is painful and debilitating. Effective treatments are limited and there's not a cure. But if we can get people to lose weight we may reduce their risk and reduce the pain and disability associated with this condition," Abbate says.

More than 27 million Americans have OA, the most common joint disease affecting middle-aged and older people. OA causes progressive damage to the [joint cartilage](#) and changes in the structures around the joint, which can include fluid accumulation, bony overgrowth and loosening and weakness of muscles and tendons, all of which may limit movement and cause pain and swelling.

Abbate and her colleagues used data from the Johnston County Osteoarthritis Project, one of the largest ongoing population-based studies of arthritis in the world. It began at Thurston in 1990 and is funded by the [Centers for Disease Control and Prevention](#) and the National Institutes of Health.

The researchers included 1,480 men and women 45 and older who were disease-free in at least one knee and followed them for approximately six years to see who developed radiographic OA - disease confirmed by X-rays; almost two-thirds were women, and more than 25 percent were African Americans.

They then divided people into categories based on weight change: people who lost 5 percent or more of their total body weight, people who maintained within 3 percent above or below their weight and those who gained at least 5 percent more than their weight.

"It was our hope that people who maintained weight would have reduced risk, but obesity is such a strong risk factor for OA, that maintaining weight showed no significant benefit," says Abbate, who recently finished her doctoral degree in epidemiology from the UNC Gillings School of Global Public Health. She also has a master's of science in public health from the school.

Weight loss can be difficult to achieve. But, Abbate says, people can aim for losing a certain percentage of their weight instead of shooting for an ideal number. "For someone who weighs 200 pounds, losing 5 percent just means losing 10 pounds," she says.

Abbate's paper was one of several research highlights at the ACR meeting for UNC's Thurston Arthritis Research Center. Abbate and two other UNC medical students, Joshua Knight, a second-year student, and Shelby Addison, a third-year student, won research awards. Amanda Nelson, M.D., a fellow at Thurston, won a fellowship award.

"We have placed a high priority on working with medical and graduate students and being open to collaborating," says Joanne Jordan, M.D., the center director and Herman and Louise Smith Distinguished Professor of Medicine at UNC's

School of Medicine. Jordan received the ACR's Award of Distinction for Excellence in Investigative Mentoring.

"We take our role as the arthritis research center for the people of North Carolina very seriously," Jordan said. "That is why we are always looking for ways to bring our research findings to the community and to learn from the community."

Provided by University of North Carolina at Chapel Hill School of Medicine

APA citation: Moderate weight loss helps reduce risk of osteoarthritis in the knee (2009, October 19) retrieved 23 September 2020 from <https://medicalxpress.com/news/2009-10-moderate-weight-loss-osteoarthritis-knee.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.