New data released on relationship between obesity and spondyloarthropathy outcomes

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Obese patients with axial spondyloarthropathy have worse disease outcomes, including higher disease activity, worse physical function and lower quality of life, according to new research findings presented this week at the 2017 ACR/ARHP Annual Meeting in San Diego.

Axial spondyloarthropathy (axSpa) is an inflammatory disease with low back pain as its main symptom. Spondyloarthritis (SpA) can also affect the arm and leg joints, and organs like the skin, eyes or intestines. Inflammation often affects the entheses, or the sites where ligaments and tendons attach to bones. People in their teens and 20s, especially young men, are most commonly affected.

Although obesity is a global health concern, there is little evidence about the effects of obesity on patients with axSpa. Researchers in Ireland conducted a study to determine the prevalence of obesity in a large cohort of patients with axSpa and to examine how obesity may be associated with certain disease outcomes.

"Obesity is one of the biggest public health challenges facing us in the 21st century. Traditionally, we have a perception of patients with axSpa being of normal or even thin body build. However, recent studies have indicated that this is not the case, and that obesity is prevalent in axSpa patients," said Gillian Fitzgerald, MD, Rheumatology Specialist Registrar at St. James's Hospital in Dublin, Ireland, and a lead author of the study. "The negative consequences of obesity in the general population are well documented, with affected patients suffering greater

morbidity and mortality. Research to date in axSpa indicates that disease outcomes may be worse in obese patients. However, existing literature looking at obesity in axSpa is relatively sparse. We sought to clarify this issue."

To conduct the study, the researchers used a cohort from the Ankylosing Spondylitis Registry of Ireland (ASRI). Standardized clinical assessments are performed on each patient included in ASRI. Structured interviews provided patient-reported data, and the patient's weight was recorded in kilograms (kg) and their height in centimeters (cm). Their body-mass index (BMI) was categorized according to the World Health Organization criteria: normal weight as less than 25kg/m2, overweight as 25-29.9 kg/m2, and obese as 30 kg/m2.

As of June 2017, 683 axSpa patients have been enrolled in this study, 77 percent of whom are male. The mean age of the patients in the study is 45.9 years, and the mean disease duration for these patients is 19 years. BMI measured among the patient cohort shows that 1.1 percent are underweight, 31.6 percent are of normal weight, 38.9 percent are overweight and 28.4 percent are obese, or a total of 67.3 percent being overweight or obese.

Patients with axSpa who are overweight or obese are also significantly older, have had the disease for a longer time, and have more comorbidities, especially hypertension and hyperlipidemia, than those who are of normal weight, according to the study results. Obese axSpa patients also have significantly higher disease activity scores and worse physical function, spinal mobility and quality of life than patients who are either normal weight or overweight. Prevalence of smoking is lower among obese axSpa patients than normal weight patients.

The researchers determined that higher BMI and obesity are associated with higher BASDAI, ASQoL, BASMI and HAQ scores, which are

widely used measures of disease activity, physical function and quality of life. Obesity is an independent predictor of higher disease activity and worse function among these patients, the study results show.

"As clinicians, we are always looking for ways to reduce the burden of disease that patients carry and to improve outcomes. In this study, we demonstrated that over two-thirds of our axSpa patients are either overweight or obese, and that these patients have more severe disease. Further research is needed to clarify this relationship between obesity and disease severity; in particular, the effect of losing weight on disease outcomes needs to be clarified. However, when devising treatment plans for axSpa patients, this study provides rheumatologists with a strong rationale to include strategies to actively control weight," Dr. Fitzgerald said.

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