Study launched to see if weight loss surgery before knee replacement improves outcomes

May 17 2018

Could weight loss surgery before knee replacement improve outcomes or even eliminate the need for joint replacement in severely overweight patients? A study by researchers at Hospital for Special Surgery (HSS) aims to answer that question.

Orthopedic surgeons often encourage obese patients considering knee replacement to try to lose weight before the procedure. The study, known as SWIFT (Surgical Weight-Loss to Improve Functional Status Trajectories Following Total Knee Arthroplasty), is enrolling patients at a number of hospitals nationwide, including HSS. The goal is to compare outcomes in individuals who have bariatric surgery versus those who do not have weight loss surgery before joint replacement. Researchers also aim to determine if losing a significant amount of weight could enable patients to hold off on knee replacement or postpone it indefinitely.

"This is the first prospective study of its kind," explained Alexander McLawhorn, MD, an orthopedic surgeon and lead investigator at HSS. "We hypothesize that weight loss resulting from bariatric surgery prior to knee replacement will improve joint replacement outcomes in obese patients with painful arthritis. It will also be interesting to see if weight loss and reduced stress on their joints will result in less pain and improved mobility, which may enable patients to postpone knee replacement surgery."

A previous retrospective study at HSS found that in severely obese patients, bariatric surgery performed prior to a total hip or knee
replacement reduced complications while patients were in the hospital and in the first 90 days after joint replacement surgery.

In the current study, researchers will divide enrolled patients into two groups. One group will undergo bariatric surgery prior to knee replacement, and the other group will have knee replacement only. Patients who choose to have weight loss surgery will have the procedure at New York Presbyterian Hospital. All knee replacement surgeries will take place at HSS.

Approximately 9 to 13 months after bariatric surgery, participants in the first group will be evaluated to determine if they still wish to go ahead with knee replacement; if they feel the surgery can be delayed; or if they believe they no longer need it. Those who choose to have a knee replacement will complete nine research visits over the course of 3.5 to 4 years, in addition to the standard of care visits required for bariatric surgery and knee replacement. Research visits will include the completion of questionnaires to measure pain, physical functioning, quality of life and patient satisfaction; vital sign measurements; and physical function assessments, including the ability to walk a quarter of a mile and climb stairs.

Participants in the control group will undergo a total knee replacement without weight loss surgery and will complete six research visits over the course of 2.5 to 3 years, in addition to the standard of care visits required for knee replacement surgery. The research visits for this group will include the same evaluation activities as those in the bariatric surgery group.

Provided by Hospital for Special Surgery

Citation: Study launched to see if weight loss surgery before knee replacement improves
outcomes (2018, May 17) retrieved 2 February 2024 from

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.