Aquatic therapy soon after total knee arthroplasty improves outcomes

December 21 2011

Despite increased use of total hip arthroplasty (THA) and total knee arthroplasty (TKA), there is a notable lack of consensus about optimal postoperative treatment. Aquatic therapy has been shown to have a beneficial effect, and it is typically begun two weeks after surgery, after the wound has healed. According to a new study published in the *Archives of Physical Medicine and Rehabilitation*, beginning aquatic therapy just 6 days after TKA may lead to improved results, while delaying its onset an additional week may be more appropriate after a THA.

"This multicenter study demonstrates that the timing of physiotherapy measures, such as aquatic therapy, has clinically relevant effects after TKA," says lead investigator Thoralf R. Liebs, MD, of the Department of Orthopaedic Surgery, University of Schleswig-Holstein Medical Center, Kiel, Germany. "Ours is one of the few studies that demonstrates a clinically important effect on the health-related quality of life after TKA by a factor that can be influenced by the healthcare professional. The intervention is simple to administer, and requires limited extra input from the health care professional."

THA and TKA patients were randomly assigned to receive aquatic therapy beginning either 6 days or 14 days after the procedure. In both groups, therapy lasted 30 minutes, three times a week, up to the fifth postoperative week. Physical function, pain, and stiffness were evaluated 3, 6, 12, and 24 months after the procedure.

After hip arthroplasty, all measurements at every follow-up period were better in the patients who began aquatic therapy after the wound had healed. In contrast, all mean outcomes were better in the group that began therapy 6 days after knee arthroplasty.

"THA has a high rate of patient satisfaction, and patients report an improved quality of life after the procedure. Additional interventions, such as early aquatic therapy, may not lead to much improvement," Dr. Liebs hypothesizes. "After TKA, patients are less satisfied, so the additional intervention has a greater effect. The hydrostatic force of water reduces effusion in the knee joint. Because the knee capsule is closed after TKA, reduced effusion leads to less pain. In THA, the joint capsule is not closed, so the effect of reduced effusion is less."

More information: The article is "Multicenter Randomized Controlled Trial Comparing Early Versus Late Aquatic Therapy Following Total Hip or Knee Arthroplasty," by Thoralf R. Liebs, MD, Wolfgang Herzberg, MD, Wolfgang Rüther, MD, PhD, Jörg Haasters, MD, PhD, Martin Russlies, MD, PhD, Joachim Hassenpflug, MD, PhD, on behalf of the Multicenter Arthroplasty Aftercare Project, MAAP. It will appear in the Archives of Physical Medicine and Rehabilitation, Volume 93, Issue 2 (February 2012). doi:10.1016/j.apmr.2011.09.011

Provided by Elsevier

Citation: Aquatic therapy soon after total knee arthroplasty improves outcomes (2011, December 21) retrieved 24 April 2024 from https://medicalxpress.com/news/2011-12-aquatic-therapy-total-knee-arthroplasty.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.