

Survivorship of uncemented acetabular parts compared

June 29 2012

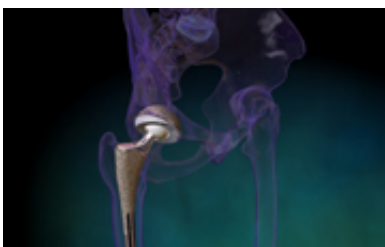


Image courtesy of Blausen Medical

For total hip arthroplasty revisions, titanium wire mesh cups and cross-linked polyethylene liners are among new uncemented acetabular components that improve long-term implant survival, according to a study published in the June 20 issue of *The Journal of Bone & Joint Surgery*.

(HealthDay) -- For total hip arthroplasty revisions, titanium wire mesh cups and cross-linked polyethylene liners are among new uncemented acetabular components that improve long-term implant survival, according to a study published in the June 20 issue of *The Journal of Bone & Joint Surgery*.

To compare the survivorship of historical and current uncemented acetabular components following total hip arthroplasty, Hilal Maradit Kremers, M.D., of the Mayo Clinic in Rochester, Minn., and associates followed 3,236 patients who underwent 3,448 revision total hip arthroplasty procedures from 1984 through 2004. They compared overall and cause-specific survival rates of 10 different acetabular

components, adjusting for age and sex.

The researchers identified 605 repeat revisions, including 386 cup revisions, with an overall survival rate of 69 percent at 15 years. Cup revision for aseptic loosening was significantly more common for beaded designs (hazard ratio [HR], 2.01) and less common for trabecular metal designs (HR, 0.25), compared with titanium wire mesh. During a median 5.2-year follow-up of 534 total arthroplasties with cross-linked polyethylene liners there were no liner revisions for wear and/or osteolysis. The risk of wear-related revision was significantly lower with cross-linked polyethylene than conventional liners. The risk of repeat revision was not associated with femoral head size or use of an elevated liner.

"In the setting of revision total [hip arthroplasty](#), cup survival was worse with beaded acetabular designs compared with titanium wire mesh or highly porous designs," the authors write. "Cross-linked polyethylene liners were associated with a reduced risk of wear-related liner revision."

One or more of the authors disclosed receiving payments or services, either directly or indirectly, from a third party in support of an aspect of this work.

[Abstract](#)

[Full Text \(subscription or payment may be required\)](#)

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: Survivorship of uncemented acetabular parts compared (2012, June 29) retrieved 11 May 2024 from <https://medicalxpress.com/news/2012-06-survivorship-uncemented-acetabular.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.