

Metal-on-metal hip replacement patients at no more risk of developing cancer

April 3 2012

Patients who have had metal-on-metal hip replacements are no more likely to develop cancer in the first seven years after surgery than the general population, although a longer-term study is required, a study published in the *British Medical Journal* today claims.

A recent [BMJ](#) and BBC Newsnight investigation looked into the potentially high level of [toxic metals](#) from failing [hip implants](#) which may, in future, affect thousands of people around the world. The investigation also looked at why these hip replacements were allowed despite the risks being known and documented for decades. The BMJ has a large collection of articles about the safety of medical devices which can be found here: www.bmj.com/article-clusters.

This study, commissioned by the National Joint Registry of England and Wales and carried out by authors from the Universities of Bristol and Exeter, looks at whether these concerns are valid. The registry contains records of over one million procedures from at least 97% of orthopaedic units. Every year registry data and hospital episode statistics are linked up to check how patients who have had joint replacements are faring.

In this study [cancer rates](#) in patients with metal-on-metal hip replacements were compared with both a group of patients who had other hip bearing surfaces implanted and the general population. Overall, 14% (40 576) of registered patients had some type of metal-on-metal bearing surface: 7% (21 264) had a stemmed metal-on-metal [prosthesis](#) and 7% (19 312) had a resurfacing procedure. The researchers compared

patients' outcomes using mathematical modelling. The models included the age and sex of the patient as well as three measures of general health at the time of [hip surgery](#) (the American Society of Anaesthesiologists grade that scores the patient's other serious illnesses, the number of distinct diagnostic codes recorded at time of surgery, and the number of NHS funded admissions to hospital in the previous five years). The authors do say, however, that comparison with the general population is not straightforward as hip replacement patients "tend to be healthier than others of the same gender and age group".

Results show that the chance of a 60 year old man with moderate health and a metal-on-metal stemmed hip replacement being diagnosed with cancer in the five years following surgery is 6.2%, compared to 6.7% chance with hip replacement using other bearing surfaces. For women, these figures were 4.0% for metal-on-metal stemmed hip replacement and 4.4% for other bearing surfaces. Further results show that the incidence of cancer diagnosis is low after hip replacement and lower than that predicted for the age and sex matched general population.

The authors hope that this study will help clinicians reassure patients that the "risk of cancer for [hip replacement](#) patients is relatively low" with no evidence of an increase in cancer associated with metal-on-metal hips. They add though that this only shows results for up to seven years following surgery and the analysis of long-term data is required over the next few decades as some cancers take many years to develop.

Provided by British Medical Journal

Citation: Metal-on-metal hip replacement patients at no more risk of developing cancer (2012, April 3) retrieved 26 April 2024 from <https://medicalxpress.com/news/2012-04-metal-on-metal-hip-patients-cancer.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.