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Cancer Following Total Joint Arthroplasty

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Letters to The Editor

Cancer Following Total Joint Arthroplasty

To the Editors: The recent meta-analysis by Onega et al. (1) recorded an increased risk for melanoma and prostate cancer following total joint arthroplasty. The authors conclude that the results are likely to represent chance or bias, particularly because there is no obvious mechanism for these findings. As these investigators note, however, both Co and Cr are present in these implants and levels 10 to 20 times normal have been documented in patients with metal-on-metal joints (2). In addition, the comment about a lack of mechanism is not correct, at least for melanoma. We and others have provided extensive experimental data that metals are important in the pathogenesis of melanoma (see refs. 3, 4 for reviews) and a large, but a largely neglected, occupational epidemiology has shown an increased risk for melanoma in printmakers, metal workers, and others exposed to metals (see ref. 4 for the summary). A recent report on a large Nordic cohort of total hip replacement patients has also shown a substantial increase in melanoma and prostate cancer as well (5).

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