



The Canadian Orthopaedic Association
L'Association Canadienne d'Orthopédie



To all of my Colleagues and members of the COA,

Re: Metal-on-metal Articulations: An update following the American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting in San Diego (February 2011)

I was fortunate, as your representative, to moderate the session on metal-on-metal articulations during the recent AAOS Annual Meeting.

It was clear that our information was right on the money in many respects. The one area of global confusion seemed to be the area of metal ions. While everyone would be concerned with a patient's Cobalt blood level of over 7 PPB, there was a general consensus that this level by itself would only indicate the need for close follow up. As the COA has stated, the blood level, in isolation, would not indicate the need for revision. However there also was a general consensus that a rising blood level over time would also be a very concerning event and probably more important than a single high blood level. There were no absolute numbers but 5 or 6 PPB would only be seen in about 5% of patients.

Final response:

1. Painful hips with a positive MRI for a soft tissue mass and a high blood level should be revised.
2. Painful hip with a positive MRI for a soft tissue mass and low blood levels should be revised.
3. Soft tissue mass, increasing in size, with or without high blood levels should be revised.
4. Blood levels on their own bear close follow up - not revision.
5. Rising blood levels on their own are concerning but without a soft tissue mass or pain would probably just indicate close follow up - not revision.
6. However, most papers would suggest blood levels do, and should, form a good basis of "follow up management" for patients with problematic metal-on-metal articulations.

I hope this somewhat clarifies the decision-making required; particularly with respect to ASR, but also for any problematic metal articulation

Warm regards

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