



*Title*

**METAL-ON-METAL HIP JOINT TRIBOLOGY**

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*Purpose/Premise*

This article reviews the tribological features of metal-on-metal total hip replacements.

*Material and Methods*

The authors researched the current literature on various materials used in articulating surfaces of orthopaedic implants.

*Outcomes*

The authors found that the friction and wear behavior of metal-on-metal bearings is subject to mixed lubrication and/or fluid-film lubrication. They also found that the thickness of the fluid film relative to the roughness of the articulating surfaces affects the tribological features of the articulation.

*Conclusion/Recommendation*

The authors conclude that the reduced film thickness found in metal-on-metal articulations is offset by lower roughness values.

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