As a patient there are two reasons you should consider a metal-on-metal total hip replacement:

- Extremely durable surface that is unlikely to ever wear out.
- Stability of the joint. Using a metal-on-metal bearing surface allows the manufacture of a large bearing hip joint that will not dislocate.

Traditional hip replacements are not durable enough for many of today's younger more active patients. Traditional metal-on-plastic bearing devices have been shown to fail at a rate of thirty (30%) percent by seven years in this patient group. Recently, several new bearing couples have been developed as more durable options:

- Crosslinked Polyethylene -- More durable than standard plastic, but still not well tested. Previous modifications in plastics have been unsuccessful.
- Ceramic-On-Ceramic -- Very durable bearing surface. Unlikely to ever wear out. However, manufacture of this brittle material is very tricky, occasionally resulting in failure by fracture of the ceramic parts while in use.
- Metal-On-Metal -- Very durable bearing surface. Unlikely to ever wear out. No possibility of cracking like the ceramic.

Although metal-on-metal and ceramics are equally durable as bearing surfaces; a metal-on-metal bearing has one distinct advantage over all the other bearing surfaces. Large diameter joint replacements can be manufactured which allow a surgeon to reconstruct the hip in a mechanically sound fashion similar to a patient's original hip, and thus avoid dislocation after surgery. This is a major advantage that should not be underestimated. It is estimated that 5-7% of patients with a total hip replacement will suffer a dislocation over ten years. With large bearing joints the chance is less than one percent. This improved stability makes it possible for us to offer patients a new hip without all the traditional restrictions of total hip replacement. (No deep bending, crouching, or crossing legs.) Patients can kayak, participate in dance and martial arts, etc.

There is one potential problem with metal-on-metal bearings. Normal wear results in release of metal particles into the body. One problem with any artificial bearing surface is the wear debris generated by normal daily wear and tear. The large volumes of plastic debris generated by metal-on-plastic (traditional) replacements results in large amounts of bone destruction around implants, and has been the major cause for failure in young patients. Both ceramic-on-ceramic and metal-on-metal bearings generate about 99% less wear debris than traditional bearings and the debris generated seems to cause less irritation to the bone. There has been some speculation of the potential for metal debris to cause cancer in the body. However, careful studies to date have not shown any links.

My opinion is that the advantages of metal on metal bearings strongly outweigh the potential risks. Now we can return patients to normal function with almost no restrictions and expect their implants to last more than ten years at very high activity levels. Most patients will never require another operation on their hip.
Obtained from Dr. Gross website