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## **Hip Resurfacing in Women:**

This is an important topic that has come to light recently in the national media (NY Times Nov 8, 2008). In looking at results from around the world, it is becoming increasingly evident that women have poorer results with hip resurfacing than men. I believe this has a few reasons and is largely due to the fact that a hip resurfacing depends upon the quality and amount of bone supporting the implants, particularly on the femoral head side. One can think of the bone as a foundation that supports the femoral head implant.

First of all, women tend to have lower bone density than men. Because of this fact, a resurfacing implant in a woman will be resting on lower density bone than in a man. At present, we don't have guidelines that tell us what a safe level of bone density is. With research studies looking forward, we may be able to use bone density tests preoperatively to help predict the success of the operation. At times, I use a DEXA bone density test to help gauge the strength of the bone in the femoral neck area. In general, if there is osteoporosis present, in a man or a woman, I don't recommend hip resurfacing. Furthermore, we do know that bone density further decreases after menopause. This could potentially lead to problems if the bone under the implant gets weaker with age.

Secondly, women tend to be smaller-boned than men. This translates to a smaller size implant; as stated before, this would lead to a smaller foundation to support the resurfacing head. There is also literature (De Haan et al, JBJS Br, 2008) suggesting that smaller implants may be more sensitive to positioning, thus making surgical placement of critical importance.

Thirdly, women tend to be more prone to allergies than men. Although allergy (hypersensitivity) to the metals is not a large cause of hip resurfacing failures, it seems to be more prevalent in women.

Thus, all of these factors may contribute to a higher failure rate of hip resurfacing in women compared to men.

### **Conclusion**

Given these facts, I believe that hip resurfacing should be used more carefully in women. There is a narrower window in selecting women as patients, because of the issues of child-bearing earlier in life, and bone density later in life. However, I do think that hip resurfacing can have as successful results in women as in men, and would be happy to discuss the option of hip resurfacing with you during your consultation.