Advantages of the Direct Anterior, Minimally Invasive Approach to the Hip

Key Advantages

1. Less Pain and Quicker Recovery:
- My direct anterior approach (Smith Petersen or modified Watson Jones) goes between muscles rather than cutting them.
- Patients typically experience less pain and faster recovery compared to traditional posterior (Southern) or lateral (Hardinge) approaches.

2. Lower Risk of Dislocation:
- The anterior approach involves ligaments at the front of the hip, which are less stressed during daily activities(i.e. putting on socks and shoes, bending over, getting out of chair or off toilet, etc).
- This results in a lower chance of dislocation in the early postoperative period allowing those ligaments to heal.

3. Use of Live X-ray (Fluoroscopy):
- Allows real-time assessment of implant position, size, and leg length during surgery.
- Enhances reproducibility and precision of the procedure.

Robotics

Although I performed the first Mako™ robotic hip in our region, I found that the additional steps—CT scans, guide placement, and increased surgical time—did not offer sufficient benefit. I now prefer live x-ray (fluoroscopy), which is more adaptable, reduces incision size, operating time, and blood loss from surgery.

Bikini Incisions

The bikini incision, originally described in 1917 by Smith-Petersen, is a classic approach. Recent technological advances have revived its use for total hip replacements. The downside to this approach is that the skin of some patients overhangs the wound and can cause difficulties with skin and incision care. While I used this incision for a time, I now use a modified version that is equally cosmetic, allows for a smaller incision, and reduces the risk of skin numbness from nerve injury.

Summary

I perform all my hip replacements using my version of the direct anterior approach. This technique has consistently resulted in less pain and quicker recovery for my patients.

- Dr. Michael Swank