Direct Anterior Total Hip Arthroplasty Through Bikini-Style Incision

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Background:

Over the last two decades, the direct anterior approach (DAA) for total hip arthroplasty (THA) has soared in popularity among orthopedic surgeons. Traditionally, surgeons have utilized a longitudinal skin incision while performing DAA-THA. Issues with delayed wound healing have led to some surgeons opting for a "bikini-style" transverse skin incision. The bikini-style incision avoids the hip flexion crease and is thought to place the wound under less tension as it parallels the flexion crease. Some studies have shown that the bikini-style incision decreases the rate of post-operative heterotopic ossification formation around the hip joint. Overall the bikini-incision appears to be a safe alternative to a longitudinal incision and offers potential benefits.

Purpose:

This video overview and case presentation demonstrates a direct anterior approach Total hip arthroplasty through Bikinistyle incision.

Methods:

The history, surgical anatomy, alternative incision, and surgical treatment are described. The surgical case is of a 63-year-old female with end-stage hip osteoarthritis causing debilitating pain and preventing her from performing her activities of daily living. After a thorough discussion of risks, benefits and prognosis, the patient elected to proceed with THA.

Results:

The patient successfully underwent DAA THA utilizing a bikini-style incision and was discharged home the same day. Post-operatively the patient recovered well without complication.

Conclusion:

DAA THA utilizing a bikini-style incision is a safe and effective alternative to a traditional longitudinal incision with potential benefits of improved wound healing/cosmesis, as well as the potential benefit of decreased post-operative heterotopic ossification formation.