Surgical Dislocation Approach to the Hip for the Treatment and Excision of Pigmented Villonodular Synovitis

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Background:

Pigmented Villonodular Synovitis (PVNS) is a synovial tissue disorder characterized by the destructive, unchecked proliferation of synovial-like mononuclear cells. It can be localized or diffuse, intra-articular, extra-articular, or in the tendon sheath (giant cell tumor of the tendon sheath). Patients often present with chronic joint swelling, an insidious onset of pain, stiffness, and limited range of motion. When there is intra-articular involvement, treatment can be arthroscopic or open, with each method having its own distinct advantages and limitations.

Purpose:

This video overview and case presentation demonstrate the treatment of pigmented villonodular synovitis (PVNS) of the femoral neck and hip joint approached through a surgical dislocation of the hip.

Methods:

The anatomy, pathogenesis, diagnosis, and treatment options for PVNS and intra-articular hip pathology are reviewed. A case of an 18-year-old male with a history of atraumatic left hip pain is presented. The pain and limited range of motion affected his daily living and his ability to play soccer.

Results:

Through a surgical dislocation approach, as described by Ganz, the PVNS was removed, and the femoral neck and head were reshaped to restore their anatomic shape. Post-operatively, the patient's pain resolved, his range of motion improved, and his recovery was tracked clinically and radiographically.

Conclusion:

Surgical hip dislocation for evaluating and treating PVNS or other intra-articular hip pathology provides a comprehensive approach to thoroughly evaluating and treating the pathology.