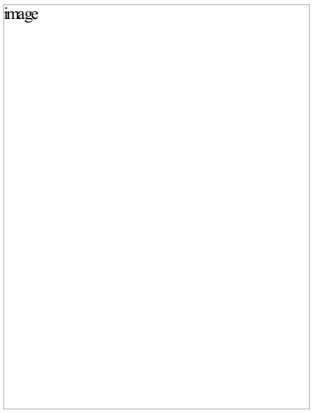

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OPEN SURGICAL MANAGEMENT OF DEEP VENOUS OCCLUSIVE DISEASE

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KEYWORDS:
Open Venous Reconstruction, Deep Venous Bypass, Deep Venous Reconstruction, Palma Procedure, May-Husni Procedure, Deep Venous Obstruction

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ABSTRACT

Endovascular techniques have revolutionized the management of deep venous occlusive disease. Open surgery; however, is still required for cases that prove refractory to endovascular interventions. The surgical management of deep venous occlusive disease typically involves venous bypass. Preoperative planning before open venous surgery relies upon dynamic imaging to clarify the location and severity of venous obstruction, the assessment of infra-inguinal reflux, and the delineation of bypass origination and target vessels. Adjunct arterio-venous fistulas and anticoagulation may improve patency rates of open surgical venous bypass. The timely recognition and management of complications improves secondary patency rates.

INTRODUCTION

Venous outflow obstruction leads to proximal venous hypertension proportionate to the extent of flow resistance. The iliac venous system does not demonstrate as much collateral flow compared to the femoral and popliteal systems and is therefore prone to severe hypertension. Clinically, a partial or complete obstructing thrombus in the iliac system, despite the inflammatory cascade that promotes lysis of the obstructing thrombus or re-cannulation of the venous lumen, may lead to severe venous claudication, soft-tissue edema, and skin ulceration in the ipsilateral lower extremity. Due to the significant morbidity and mortality associated with these symptomatic lesions, surgical intervention is indicated. When endovascular management fails, it is imperative to utilize open surgical techniques to address the refractory lesion. Since the first reported successful venous reconstruction by Warren and Thayer,[1] advancements