

“Akgul’s Technique” in Repair of Deep Vein Valves in Patients with Venous Insufficiency: Editorial

Derin Venöz Yetmezliği Olan Hastalarda Kapak Onarımında “Akgül Tekniği”

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Luke, first, proposed the probability of progression of chronic venous insufficiency of the lower extremities due to congenital absence of valves in the superficial femoral and popliteal veins in 1941.¹ Congenital malformations such as vein valve aplasia lead an increase in hydrostatic pressure with, eventually, progression of vein insufficiency. Since then, attention had been focused on the deep vein valves as well as valvular incompetence in patients with chronic leg enlargement. One of the earliest Pioneer of this issue was Kistner who performed valvoplasty and/or vein segment transposition to treat valvular incompetence.²

Patients with chronic deep venous insufficiency still remain a big challenge for vascular surgeons. Primary venous incompetence due to deep vein valve insufficiency plays an important role in the aetiology in the pathologic process of the disease. The insufficient deep venous valves in this group of patients usually underwent surgical repair with various surgical technics presented in several studies which consists of internal valvuloplasty, transposition, transplantation, neo valve and cryopreserved allograft. wrapping, Psathakis II procedure, external valvuloplasty, external valve construction and percutaneous placed devices.³⁻⁷

Several cuff techniques for vein valves with various vascular outcomes are performed in patients with deep vein insufficiency. I performed another technique, “Akgul’s technique”, for the first time for repair in patients with deep vein insufficiency. The techniques and the consequences of this new type of repair published in one of the most popular vascular journal in near future. This technique is based on wrapping of patient’s own sapheneus vein as a wrapping cuff, called “native-cuff”. One of the most common etiology in deep vein insufficiency is post-thrombotic syndrome, associated with valve destruction is not suitable with “Akgul’s technique”, since the patient needs a competent valve to repair. In this cohort of patients, treatment is basically conservative.

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Briefly, “Akgul’s technique” could be performed in underwent common and/or superficial femoral vein valves repair with or without sapheneus vein stripping. Deep vein valves repair with this technique were performed by native sapheneus vein in itself. The sapheneus vein prepared for repairing for deep vein valves. The only drawback of the

technique is the absence of deep vein valves in patients with deep vein insufficiency.

Chronic venous insufficiency has been identified in the last 30 years by the usage of duplex-scanning, which is essential for “Akgul’s technique” since I need to see the deep vein valve as well as the structure of the mentioned leaflets.

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