

Endovenöz Lazer Ablasyon Sonrası Nadir Bir Nüks Nedeni: Dodd Perforatör Yetmezliğine Bağlı Rekanalizasyon

An Unusual Cause of Recurrence After
Endovenous Laser Ablation: Recanalization Due to
Incompetence of Dodd's Perforator: Original Image

Hamit Serdar BAŞBUĞ,^a
Yalçın GÜNERHAN,^a
Hakan GÖÇER,^a
Kanat ÖZİŞİK^a

^aDepartment of Cardiovascular Surgery,
Kafkas University Faculty of Medicine,
Kars

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Yazışma Adresi/Correspondence:
Hamit Serdar BAŞBUĞ
Kafkas University Faculty of Medicine,
Department of Cardiovascular Surgery,
Kars,
TÜRKİYE/TURKEY
s_basbug@hotmail.com

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Endovenous laser ablation (EVLA) is percutaneous treatment modality of the incompetent superficial veins of the lower extremity. The indications for EVLA are identical to those of endovenous radiofrequency ablation, sclerotherapy and open surgery. Axial veins, namely the great saphenous vein (GSV), small saphenous vein (SSV) and accessory saphenous veins (ASVs), are the primary targets of this therapytreatment method.¹ However, perforating veins (PVs) that connect the deep venous system to the superficial veins are often ignored during this treatment processprocedure.² The most significant PVs below the knee level are the Cockett's perforators (the distal third of the leg), Sherman's perforator (middle third of the leg), and the Boyd's perforator (the proximal third of the leg). Dodd's perforator (inferior 1/3 of the thigh), and the Hunterian perforator (mid-thigh) represent the thigh perforators.³ In this paper, a patient with a recanalized GSV six months after the treatment with EVLA due to an omitted incompetent Dodd's perforator, and our complementary treatment was presented.

A 54-year-old female referred to our outpatient clinic with the persistent symptoms of venous insufficiency despite she had after beigen treated with the endovenous laser ablation six months ago previously. She had beenhad treated with endovenous laser ablation on of her right GSV in a vascular surgery clinic. However, she was complaining about theed that the procedure was unsuccessful, and her symptoms ineffectiveness of the procedure as she had persistence of the symptomds. Our eExamination with a color Doppler ultrasound revealed an insufficiency in the Dodd's perforator on her the right thigh (Figure 1). She The patient also had endothe-lial signs of the previous endovascular laser ablation inside of her GSV (Figure 2). It was thoughtWe supposed that the endovenous ablation had probably been done through the GSV, and the Dodd's perforator insufficiency had been ignored and left untreated. We performed an additional endovenous radiofrequency ablation again to whole GSV length, by apply-

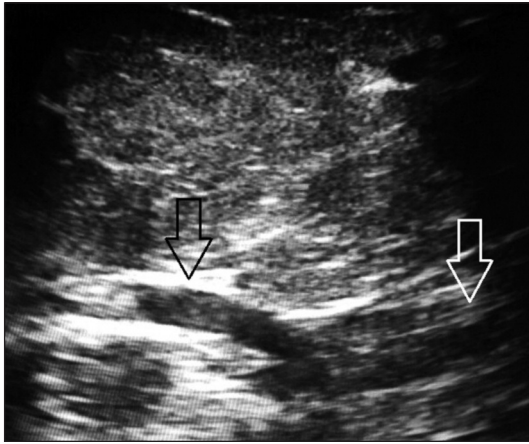


FIGURE 1: Black arrow is shows incompetent Dodd's perforator. The white arrow points great saphenous vein.

ing extra energy to the Dodd's perforator segment to complete the treatment. After the procedure, the leg was wrapped with a compression bandage, and kept elevated for the next four hours. The patient was discharged on the next day, and recommended to rest for the next two days.

The blood flow in PVs is usually from superficial to the deep venous system. However, some of them sometimes there may be may show a bidirectional flow. In a case of such a reflux, during each muscle contraction blood flow reverses from deep

to the superficial system during each muscle contraction.² Thus, valve incompetence in any of those PVs may further cause recanalisation of the formerly ablated axial vein, and may result in procedural failure of the endovenous treatment. This recurrence is solely due to a high venous pressure of the reversed blood flow originating from the deep venous system.

Conflict of Interest

Authors declared no conflict of interest or financial support.

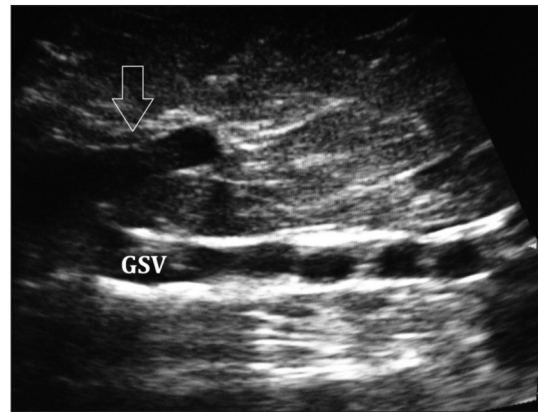


FIGURE 2: Arrow shows Dodd's perforator. Note the endothelial changes resembling the beads that were formed as a result of previous endovenous treatment.

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