Chapter 2

CHRONIC VENOUS INSUFFICIENCY AND CURRENT TREATMENT METHODS

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Introduction

Chronic venous insufficiency (CVI) is a major health problem because of the high cost of diagnosis and treatment, the significant workforce loss and the negative impact on the quality of life of the patient, which is associated with complaints such as cramp, swelling, pain, fatigue, tension, restless legs and itching in the calf (Bradbury & et al., 1999; Nicolaides& et al., 2008). In many studies, the prevalence of venous insufficiency in the population is shown to be between 20 and 40% (Allan & et al., 2000; Beebe-Dimmer& et al., 2005; Chiesa & et al., 2005). The classification developed for CVI and known as the CEAP is used to identify clinical (C), etiological (E), anatomical (A) and pathophysiological (P) characteristics of this disease (Porter & Moneta, 1995). The clinical manifestation of the disease can be in various forms ranging from telangiectasia to venous ulcer. In the new and most comprehensive epidemiological studies conducted since the beginning of this century, telangiectasia, also known as spider veins, affects 80% of the population. Varicose veins are frequently observed, and their incidence is between 20% and 64%. Color change in the foot and venous ulcers, which are more advanced stages of the venous disease, affect about 5% of the population (Callam, 1994; Evans & et al., 1999; Graham & et al.; Rabe &et al., 2012). The incidence of varicosis is increasing in direct proportion to the age in both genders and is more frequently observed in females than in males. In some studies, it has been shown that obesity, high blood pressure and sedentary lifestyle in females, smoking habits and sedentary lifestyle in males are the factors that increase the risk of varicosis (Brown & Rossi, 2013).

Anatomy and Pathophysiology

The main pathology of CVI is the insufficiency of venous valves, vein occlusion, or the combination of these two factors. The result is increased ambulatory venous pressure, in other words, venous hypertension. Especially while standing, venous hypertension further increases (Bozkurt, 2016). Venous pathology develops when venous pressure increases and the blood circulation becomes insufficient in some mechanisms. Venous pathology may result in deep and superficial venous valve in-

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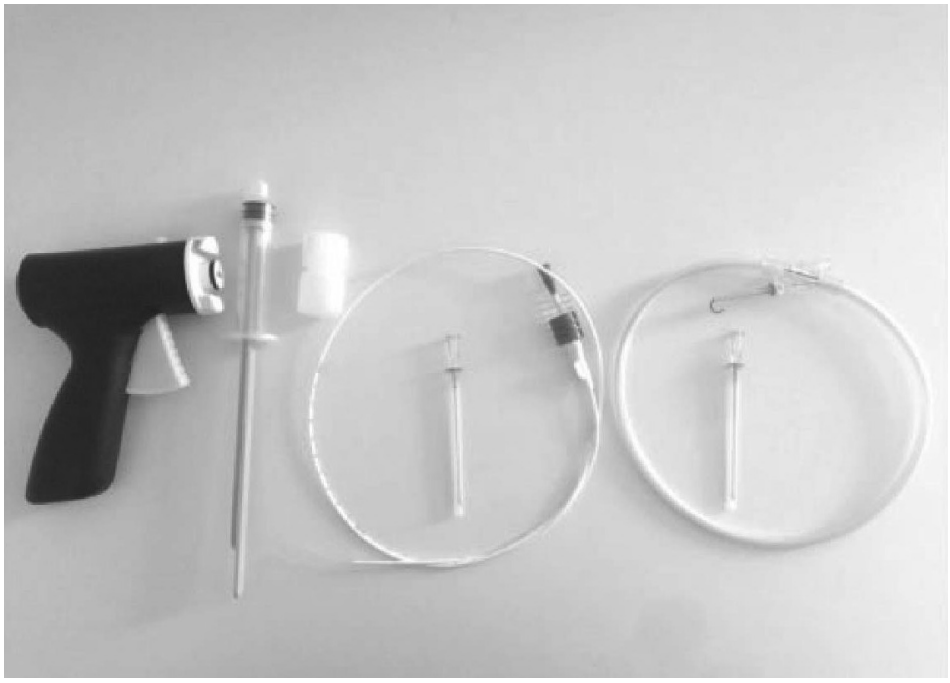

Figure 1. *Cyanoacrylate treatment kit.*

Surgical Treatment

Saphenous stripping is the standard surgical procedure. An inguinal incision should be made in the direction of the inguinal skin fold in the length of 2-3 cm. The saphenofemoral junction is explored, and the saphenous vein branches are ligated and cut. Then, at the level of the stripping to be performed at the distal end, the incision is made, the saphenous vein distal is ligated, the proximal is cut,and the stripper is inserted into the saphenous vein and advanced to the groin. If stripping is performed, the pressure in the deep veins will increase,andintervention should be made beforehand if phlebectomy or sclerotherapy is to be performed. Immediately after the skin sutures, the extremity is elevated and pulled out by applying synchronized pressure with the stripper. Immediately afterwards, tight elastic bandages are applied (Bozkurt, 2016).

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