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XXXVI

**INTERNATIONAL SCIENTIFIC
AND PRACTICAL CONFERENCE**

**"CURRENT TRENDS IN THE DEVELOPMENT OF YOUTH
THEORIES"**

Ankara, Turkey

September 12 - 15, 2023

ISBN 979-8-89145-199-5

DOI 10.46299/ISG.2023.1.36

CURRENT TRENDS IN THE DEVELOPMENT OF YOUTH THEORIES

Proceedings of the XXXVI International Scientific and Practical Conference

Ankara, Turkey
September 12 – 15, 2023

UDC 01.1

The 36th International scientific and practical conference “Current trends in the development of youth theories” (September 12 – 15, 2023) Ankara, Turkey. International Science Group. 2023. 212 p.

ISBN – 979-8-89145-199-5

DOI – 10.46299/ISG.2023.1.36

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HYPERPIGMENTATION AFTER SCLEROTHERAPY OF SPIDER VEINS

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Sclerotherapy is an injection method of treatment that is performed to eliminate reticular veins and telangiectasia's, the so-called "spider veins" on the lower extremities. The mechanism of action consists in the use of an intraluminal sclerosing agent to initiate endothelial damage with subsequent occlusion of these segments [1, 2, 3].

Since spider veins are mostly an aesthetic problem, complications of sclerotherapy attract special attention. Hyperpigmentation is the most undesirable complication of sclerotherapy. According to the literature, the frequency of occurrence can reach up to 30%. Hyperpigmentation in the sclerosing zone leads to patient dissatisfaction with the technique, although the spider veins themselves can be successfully removed [4, 5].

The mechanism of hyperpigmentation after sclerotherapy has not yet been studied. According to some signs, this type of hyperpigmentation can be classified as post-inflammatory. However, this phenomenon can also be explained by the local deposition of hemosiderin in the skin during the rupture of small blood vessels. It is also worth noting that the literature reports only cases of hyperpigmentation when using polidocanol as a solution for sclerotherapy [5, 6, 7].

Every year, sclerotherapy technique is gaining more and more popularity, so doctors who perform it should be ready for the occurrence of complications and offer their patients methods of their prevention.

The aim. To investigate the frequency of hyperpigmentation during sclerotherapy of spider veins and the ways of its prevention.

Material and methods. The study included 62 patients (These were women aged 26 to 55 years) with telangiectasia of the lower extremities who underwent sclerotherapy. We randomized all patients into two groups with 31 patients in each group. In the first group, we used 1% polidocanol as a sclerosant. In the second group, the sclerosant was hypertonic glucose. Each group was divided into two subgroups, and one of the subgroups of each group was recommended starting from the 5th day of the post-procedure period to lubricate the areas with heparin sodium ointment twice a day for one month.

Results and discussion. The patients' follow-up visit was six months after the procedure. We determined the presence of hyperpigmentation in the areas where

sclerotherapy was performed. Among all patients who underwent sclerotherapy, we registered 26 cases of hyperpigmentation, which was 41,9%.

Hyperpigmentation occurred in 14 (45,2%) cases among patients who underwent sclerotherapy with 1% polidocanol, and among the group that underwent sclerotherapy with hypertonic glucose, hyperpigmentation occurred in 12 (38,7%) cases, but there was no statistically significant difference ($p = 0,612$). When examining the first group, in the subgroup of patients who used ointment with sodium heparin there were 4 cases of hyperpigmentation, compared to 10 patients from the subgroup who did not use ointment ($p = 0,028$). And among the patients of the second group, in the subgroup of patients who used sodium heparin ointment, there were 3 cases of hyperpigmentation, compared to 9 patients in the subgroup who did not use ointment ($p = 0,019$).

Conclusion. Hyperpigmentation after sclerotherapy occur in about 42% of patients. There is no statistically significant difference in the incidence of hyperpigmentation when using 1% polidocanol or hypertonic glucose ($p = 0,612$). The use of sodium heparin ointment in the post-procedure period reduces hyperpigmentation ($p < 0,05$).

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