Do additional skin-care agents in compression stockings help improve patients' compliance?

At the annual conference of the German Society of Phlebology in Berlin Dr Guido Bruning presented a study on the benefits of integrating Aloe Vera into compression stockings. The results of the study are presented in the current "Case of the Month":

Compression therapy is the basic therapy for lymphatic edema and phlebedema. However, again and again problems surrounding compression treatment occur. Patients often complain about dry legs, scaling of the skin, itching and about stockings slipping, pinching and wrinkling.

An attempt to redress this problem is to incorporate skin-care agents into the stocking. To this end several techniques are presently available. The currently most modern and most effective approach is to integrate micro-capsules filled with various agents into the yarn. Through contact with the skin the agents are slowly dispensed from the micro-capsules and reach the surface of the patient's skin. Microencapsulation is secure and also survives washing of the stocking without difficulty.

In a prospectively designed, randomised study a stocking of A-D length with Aloe Vera and vitamin E in microencapsulation was compared with a stocking of the same length without microencapsulated skin-care agents following varicose vein surgery.

In validated questionnaires on quality of life and patient benefit it could be proven that the quality of life of the patients could be significantly improved through varicose vein surgery. Since these questionnaires represent a wide cross-section and compression treatment is only a minor detail, no effect as a result of skin-care agents could be shown.

However, patients in voluntary questionnaires gave a clear answer to this question: wearing comfort as well as itching and skin condition improved significantly for the patient as a result of incorporating skincare agents. This could also be proven by measuring skin moisture (see diagram).

The results surprised and convinced us. It may be assumed that through improved wearing comfort patients wear the stockings for longer periods of time and this will lead to a considerably more effective compression therapy. Nor did contact allergies that might have been expected through an agent such as Aloe Vera occur in patients.

Source: 53^{rd} Annual conference of the German Society of Phlebology (2011): Does the upper thigh compression stocking have postoperatively measurable benefits?, Bruning G, Kath W, Augustin M

For further questions please contact: Dr Guido Bruning, Tabea Gmbh & Co. KG, Kösterbergstr. 32, 22587 Hamburg



Dr. Guido Bruning



Diagram: Measured skin moisture under the stocking