Precautions when Using Compression Stockings

Key points to ensure safe use

Case
Compression stockings were applied to a patient who had arteriosclerosis obliterans (ASO) and a surgery was performed. This resulted in the occurrence of leg pain.

1 Patient suitability for use of compression stockings

- Confirm the patient’s medical history and indications, etc., and assess whether the patient is suitable for use of compression stockings.
- Whether compression stockings should be used in patients with arterial blood flow disorders should be carefully considered beforehand.

Symptoms suggestive of exacerbation of lower limb blood flow disorders

- Pain
- Abnormal skin color
- Cold sensation
- Artery non-palpable

Wearing compression stockings is contraindicated in patients with severe arterial blood flow disorders. However, cases involving exacerbation of blood flow disorders due to use of compression stockings to patients without proper assessment have been reported.
Mechanism of effects produced by compression stockings

When used by patients without arterial blood flow disorders

Compression caused by the stocking

Stimulation of muscle pump action

Improvement in venous blood flow

Improving venous return alleviates circulatory congestion, and the risks of thrombus formation and pulmonary embolism can be expected to decrease as a result.

When used by patients with arterial blood flow disorders

Compression caused by the stocking

Blood flow blocked in the stenosed area

Restriction of blood flow

Compression caused by stockings may further compress areas already stenosed due to atheroma, etc., resulting in artery blockage and exacerbation of blood flow disorders.

In patients with arterial blood flow disorders, the necessity of wearing compression stockings should be determined carefully with attending physicians. When use is deemed necessary, it is important to share this information with other healthcare professionals, to check if the patients’ blood flow disorder is not being aggravated while wearing the stockings, and to discontinue use of the stockings immediately if any abnormalities are observed.

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