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- | 장소 | 백범김구기념관
- | 주최 | 대한정맥학회
- | 평점 | 대한의사협회 일반 5평점(예정)



대한정맥학회
THE KOREAN SOCIETY FOR PHLEBOLOGY

Title

The NARA Socks Project: A Community-Based Multidisciplinary Initiative to Promote Compression Therapy and Improve Venous Hemodynamics

BACKGROUND

Compression therapy plays an important role in the management of venous and lymphatic disorders and in the prevention of venous thromboembolism (VTE). However, its widespread use may be limited by cost, comfort, accessibility, and public awareness. Nara Prefecture is one of Japan's leading sock-producing regions. In 2016, we launched the NARA Socks Project, bringing together healthcare professionals, university students, and local sock manufacturers to develop accessible compression stockings while promoting compression therapy and revitalizing the local industry.

METHODS

Knee-high graduated compression stockings were developed in collaboration with a local manufacturer. Sixteen healthy volunteers (8 men and 8 women; mean age, 36.4 years) were evaluated. Lower-leg circumference and interface pressure were measured before and after application. Popliteal vein diameter (VD) and peak venous velocity (PV) were assessed by pulsed-wave Doppler ultrasonography before and 20 and 40 minutes after application. Wearability was also compared with that of commercially available medical compression stockings.

RESULTS

Mean interface pressure in the standing position was 23.9 mmHg at the ankle and 19.3 mmHg at the calf. No significant change in lower-leg circumference was observed. Mean popliteal VD decreased from 8.65 mm at baseline to 8.48 mm at 20 minutes and 8.39 mm at 40 minutes. Mean PV increased significantly from 4.65 cm/s at baseline to 5.62 cm/s and 5.51 cm/s, respectively ($P < 0.008$). Overall wearability was comparable to that of existing medical compression stockings.

DISCUSSION

The NARA Socks demonstrated a measurable improvement in lower-limb venous hemodynamics with relatively mild graduated compression. Beyond product development, the project represents a community-based model integrating expertise in phlebology with multidisciplinary collaboration and local manufacturing. This experience suggests that collaboration between

healthcare professionals, local industry, and the community may provide a practical approach to improving the accessibility and dissemination of compression therapy while creating broader social value.

Reference:

Imai T. NARA Socks Project Aimed at Dissemination of Compression Therapy and Revival of Local Industry. *Cardiol Vasc Res.* 2019;3(2):1–6. doi:10.33425/2639-8486.1046.

Keywords: Compression therapy; Compression stockings; Venous hemodynamics; Venous thromboembolism; Multidisciplinary collaboration; NARA Socks Project