



Under Pressure: Compression stockings for recurrent cellulitis?

CLINICAL QUESTION

Does the use of compression stockings in patients with chronic lower limb edema decrease cellulitis recurrence?

BOTTOM LINE

In patients with chronic leg edema and recurrent cellulitis, compression therapy reduced recurrence to 15% compared to 40% with education alone at 6 months. Compression stockings are a good treatment option for patients without contraindications, although real-world patient uptake may be limited.

EVIDENCE

- Randomized control trial of 84 patients with edema for ≥ 3 months and history of cellulitis (≥ 2 episodes in the same leg in past two years).¹ Compression individualized (primarily knee-high, 23-32 mmHg).² Results statistically significant unless noted.
 - Compression plus education compared to education alone. At 6 months:
 - Recurrence of cellulitis: 15% compression versus 40% education, number needed to treat=4.

- Quality of life: Improved 8 points (scale 0-100, higher better), study underpowered for this outcome and did not reach statistical significance.
- Adherence: 88% of compression group reported wearing garments ≥4 days/week.
- No adverse events reported.
- Limitations: Non-blinded; support provided by lymphedema physiotherapists which may limit general applicability; trial stopped early for benefit.
- Prospective cohort study of 107 patients with chronic edema: Edema care (including daily compression, exercise, and skin care) administered via community services model reduced the incidence of cellulitis from 41.5/100 patient-years at baseline to zero at 6–12 months.³

CONTEXT

- While higher levels of compression(20-60mmHg) may be better for reducing edema, lower levels (10-20mmHg) also reduce edema and may result in better compliance.^{4,5}
 - Only a third of patients with a history of cellulitis reported willingness to wear compression stockings for future prevention.⁶
- Factors that increase the risk of cellulitis in chronic edema include wounds, male sex, diabetes, and obesity.⁷
- Compression stockings have been demonstrated to increase complete healing of venous ulcers compared to no compression within 12 months (70% stockings versus 40%).⁸
- Price and coverage vary significantly. Price increases with strength (example: below-knee 15-20mmHg ~\$30, 20-30mmHg ~\$85).
- Contraindications to compression stockings include severe heart failure (risk of fluid overload) and critical limb ischemia.⁴

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