Helping Compression Concordance: A scoping literature review of approaches to aid compression application and removal

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Declaration of Financial Interests or Relationships

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I have no financial interest or relationship(s) to disclose
Background

• Compression therapy main stay for chronic venous insufficiency
• Has been shown to heal VLUs and prevent recurrence
• BUT
• Non-compliance with compression ranges from 2 to 80% with higher levels found in ‘real world’ studies
• Similar for lymphedema and burn patient populations

Aim

- To explore contemporary research concerning the application and removal of compression garments
Scoping literature review search strategy

- **Key terms:**
  - Compression
  - AND (garment* OR stocking* OR therap* OR banag* OR system*)
  - AND (appli* OR remov* OR don* OR doff*).
  - AND (ulcer* OR venous OR burn* OR lymph*)

- **Electronic Databases:** Medline and CINAHL

- **Limits:** English language, non-animal research.

- **Inclusion criteria:**
  - primary research
  - research outcome related to application
  - full text available
  - the term donning of doffing mentioned in the full texts.
Results

- 12 articles reporting primary evidence, 5 studies investigated patients with VLU, 3 studies investigated donning and doffing devices, 3 studies investigated CVI without ulcers, and 2 studies examining elastic wraps.
Themes

- Devices to assist application of compression
  - Material foot slip & Metal frame
- Altered compression stocking design
  - Two piece stocking & inner and outer stocking
- Adjustable compression wraps
- Education
  - Leg exercises, physical activity & leg elevation

Only 2 studies examined impact of adherence to compression therapy
- Material foot slip & time on education
Recommendations from the literature

- When compression therapy is first prescribed patients should be provided with
  - Education
- Donning and doffing aides – Material foot slip
- Alternative compression methods such as modified stocking systems or wraps should be researched further and the evidence suggests that they have potential
- More research into alternatives is needed