

Fall Risk Associated with Multi-Layer Compression Wrap Therapy in Venous Leg Ulcers

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Problem

- Multilayer compression wrapping (MLCW) of the lower extremities is the standard of care for venous leg ulcer (VLU) treatment^{1,2}
- MLCW can result in the need for post-op shoe, and may affect balance and gait.
- In an outpatient wound center, we report 11 cases of falls with MLCW and post-op shoe



Background

- VLU affect 1% of the population over 60 years old⁷
- Over 1/3 of persons living at home > age 65 fall each year⁶
- Falls result from interactions between predisposing and precipitating factors in the environment⁴
- Falls in the geriatric population have been attributed to unsafe footwear, use of restrictive devices, gait disturbance and balance issues³
- Reducing patient falls is one of the National Patient Safety Goals⁸

Intervention



- Implement “Get Up and Go” fall risk evaluation for MLCW patients
- Referral to PT for assistive devices / therapy / balance program
- Use of low-profile MLCW * to allow normal shoe-wear

“Get-Up and Go” Test⁵

1. Stand up from a chair
2. Walk 3 meters
3. Turn around
4. Walk back
5. Sit down

Score

- 1 = normal
- 2 = slightly abnormal
- 3 = mildly abnormal
- 4 = moderately abnormal
- 5 = very abnormal

Description

Retrospective chart review of VLU pts. 2003-2006
N = 374 Total VLU pts >60 yo with MLCW and post-op shoe
Reported Falls = 11
Mean Age = 78
Community dwelling = 11
History Prior falls = 3
Duration of wear before fall = 2 weeks
Reported falls w/ low profile MLCW* in 6 months = 0

Conclusions

- Fall risk is multi-dimensional and may be associated with MLCW as a factor
- Fall risk assessment, education and referral should accompany MLCW therapy for VLU
- A low-profile MLCW that allows for the use of normal shoe wear may reduce falls
- Additional research into the relationships between MLCW and gait, balance, ROM and shoe wear is needed

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