Cost-effectiveness of a single-use, portable electrical stimulation device in the management of venous leg ulcers.

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BACKGROUND

• Electrical stimulation (ES) is a technology that can stimulate wound healing and relieve wound pain.
• A meta-analysis of published literature has demonstrated that electrical stimulation (ES) enhances chronic wound healing. 1
• Enhanced healing reduces the resource-burden and costs associated with wound management.

AIM

To explore the cost-effectiveness of using a single use, portable ES device* in patients with venous leg ulcers (VLU).

METHODS

- Post hoc analysis of an RCT in VLU
- ES + compression vs sham device + compression.\(^2\)

Application

- Electrode pads applied either side of wound
- Usual dressing applied and pads were connected to ES device OR a sham device

Results of the RCT had shown that:
- Overall, 34% of patients healed during the study.
- Overall, time to healing with ES was shorter by 3.6 weeks versus placebo (2.6 vs. 3.5 months)

RESULTS

• A separate study had calculated the weekly cost of treating wounds >1 year duration
  • £260 per week$^3$
• This was used as a basis to calculate the potential savings associated with electrical stimulation.

The faster healing time achieved in the RCT with ES could save up to £936 per patient healed.

RESULTS continued

• Taking into account the proportion of patients who achieved healing in the study (34%) and the cost of the device, the overall cost saving in the study cohort was £78 per patient

• This was driven by a reduced number of nursing visits

CONCLUSION

When used along with compression, electrical stimulation may reduce the overall cost of healing in VLU and reduce the resource burden associated with non-healing wounds.

£78
Average savings per patient

122 weeks

Every 100 patients treated ...

... frees up 122 weeks of nurse/GP time