

REVERSING DIABETIC SENSORY NEUROPATHY WITH A NOVEL ELECTRO-MUSCULAR PHYSIOLOGIC STIMULATOR

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Background

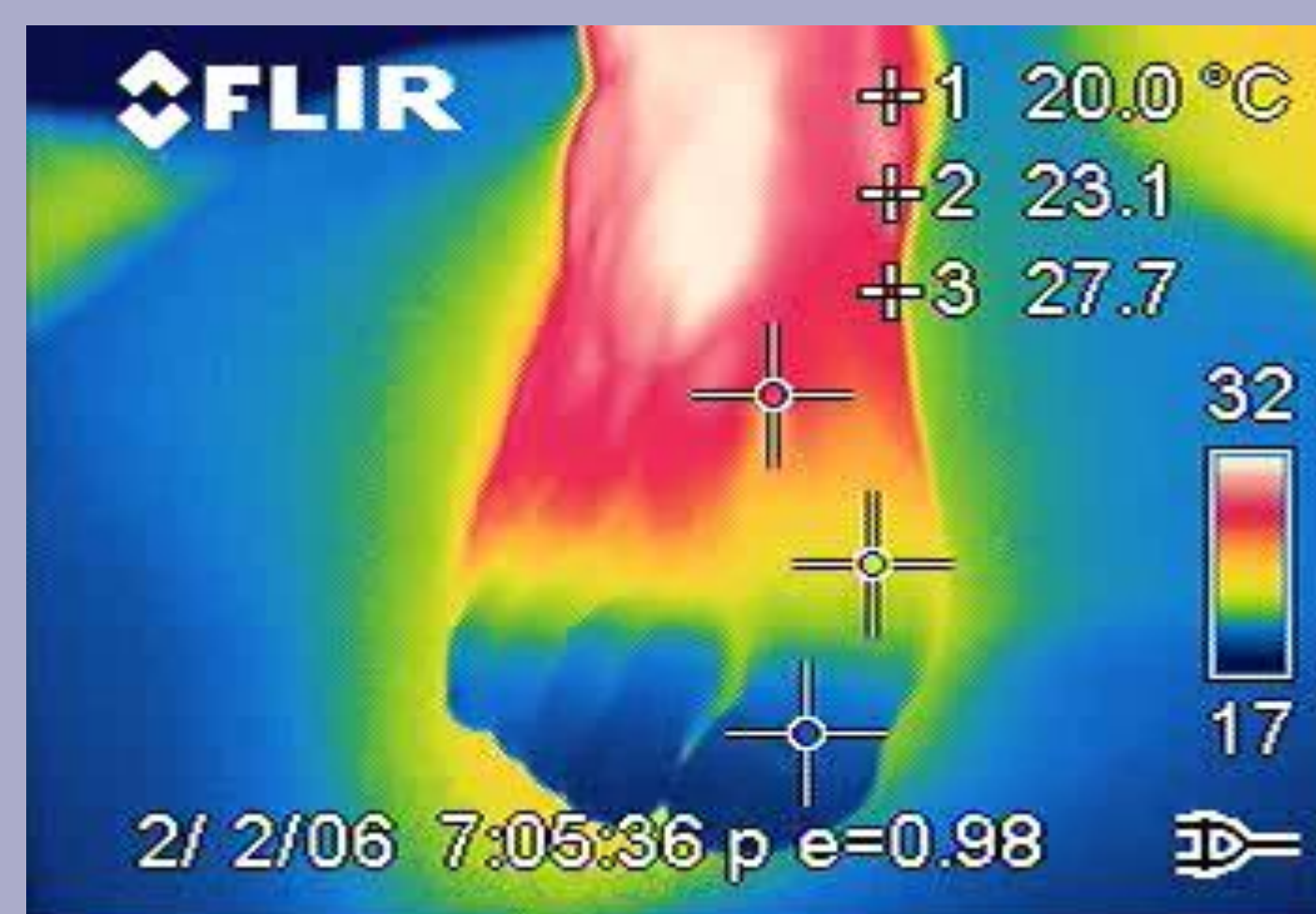
Diabetic neuropathy is a very common and problematic complication. Neuropathy plays a major role in formation of chronic wounds, major foot deformities and vascular insufficiency leading many times to amputation. FlowAid FA-100 is an external, portable, neuro-stimulator that activate the calf muscles, producing a peristaltic wave that mimics the natural muscle pump. The FlowAid device enhances the arterial blood supply and the venous return and decreases limb edema. The FlowAid has two effects on diabetic neuropathy. It treats ischemia thus facilitating better perfusion for the peripheral nerves and in the same time directly stimulating the nerves.

The FlowAid FA-100 has 4 electrodes that stimulate different muscle groups in a repetitive cycle.

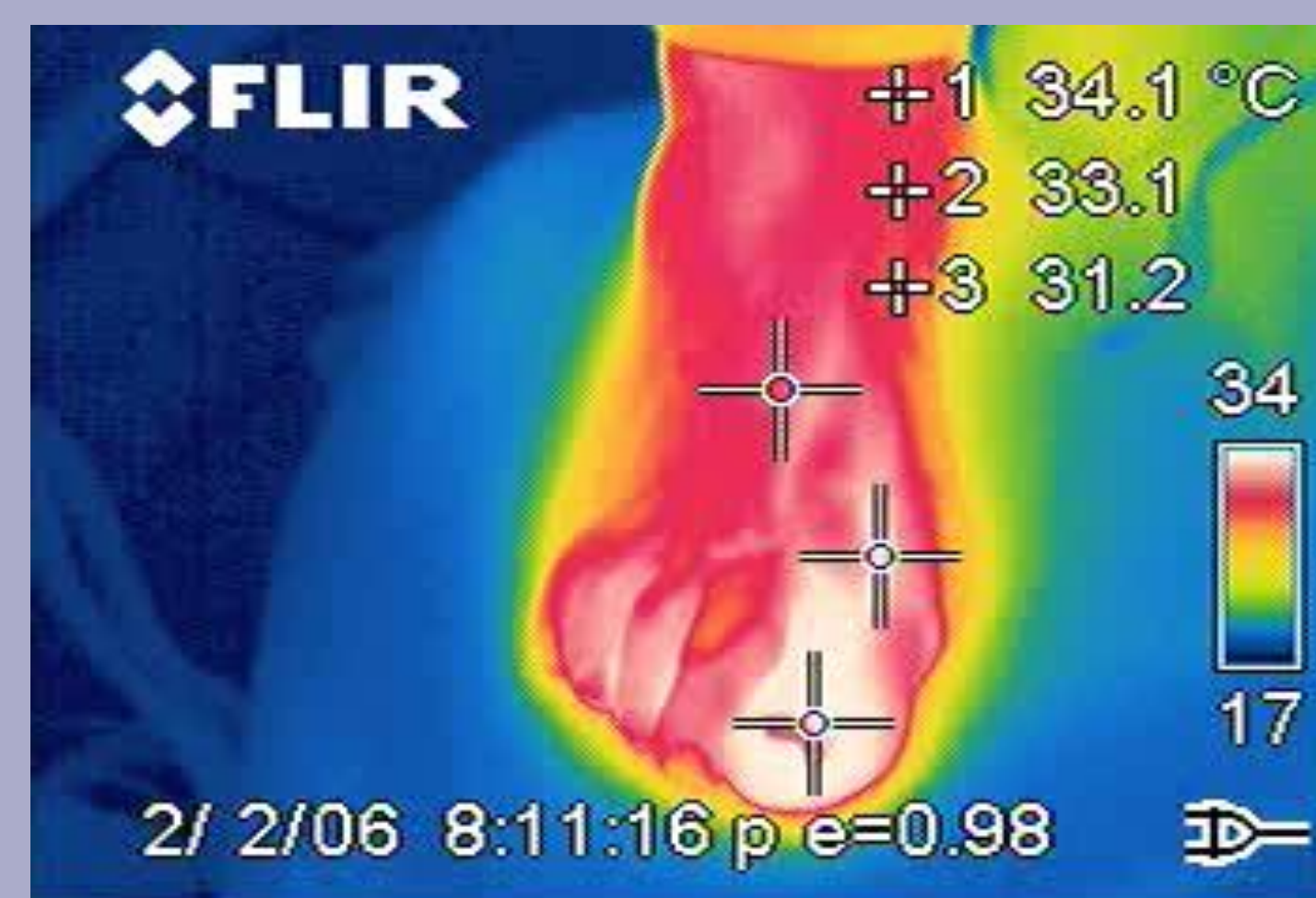
Purpose

To present the effects of FlowAid FA-100, an external neuromuscular stimulator device, on sensory diabetic neuropathy.

Thermal imaging of an ischemic foot taken before the FlowAid treatment showing cold toes



Thermal imaging of the foot after 1 hour of FlowAid treatment showing remarked temperature elevation



Conclusion

FlowAid FA-100 is a new technology with a potent ability to enhance arterial blood flow in ischemic patients by stimulating the native musculature - vascular systems. We showed that the FlowAid FA-100 device can potentially reverse the effects of diabetic sensory neuropathy. Another studies should be done to assess this effect and better understand the mechanism of action.

FlowAid FA - 100

Methods

Three patients with sensory diabetic neuropathy were treated with Flowaid FA-100 twice daily for 2 weeks. Sensation was measured with a vibration tuning fork on 5 sites on the foot before and after the treatment.

Results

All the patients described a lack of pain and vibration sensation on their plantar area of their feet before the treatment. After the Flowaid treatment all the 3 patients described a return of their pain and vibration sensation.

