ROYAL COLLEGE *of* PODIATRY

ACC LIVERPOOL

ANNUAL CONFERENCE AND EXHIBITION 2021

DELIVERING EXCELLENCE

18 - 20 NOVEMBER 2021

ABSTRACTS

Conclusion: The audit supports improvements were necessary to increase ascertainment and reliability. Possible strategies to help improve NDFA inputting:-

1. Use tools to measure i.e. year end audit
2. Encourage evidence based outcomes from reliable data
3. Review the national picture

P10 **Real world experience of the FlowOx device in diabetes foot disease in a single centre**

Fiona Main, *NHS Highland*

Diabetes foot ulceration significantly impacts quality of life leading to amputations (1). Based on NHS England data, it is estimated that more than £80 million is spent on foot ulcers and amputations annually in Scotland alone (2). A diabetes foot ulcer can develop following injury usually in the presence of peripheral neuropathy or peripheral arterial disease (3). Peripheral arterial disease can be asymptomatic or progress to intermittent claudication causing pain in the lower limb or critical limb ischaemia with constant pain which can lead to tissue loss, gangrene, amputation and death. FlowOx is a novel system to treat patients with peripheral arterial disease (PAD) related problems such as pain, reduced walking distance and chronic ulcers.

Innovation

The FlowOx system consists of a chamber where negative pulsating pressure draws blood down into the leg improving perfusion of the lower limb, skin blood flow and oxygenation. The non-invasive system can be used in the patient's own home in conjunction with a multi-disciplinary team (MDT) approach or where there is no option of revascularisation.

Impact

FlowOx system was tested on thirteen (9 male, 4 female) patients with a chronic diabetes foot wound of greater than six months. All patients presented with co-morbidities and all wounds were neuroischaemic. One patient withdrew from the trial. Following a standard treatment cycle of FlowOx, two hours per day for three months, 31%(4) of foot wounds healed. At this stage, one patient experienced a minor amputation and another, had a major amputation. The FlowOx was continued and there was further complete healing in 39%(5) patients following 2-4 treatment cycles. FlowOx appears to be a promising treatment option in the management of neuroischaemic diabetes foot ulceration. However, further studies incorporating a control group are required to confirm the efficacy.

P11 **Shared patient and multidisciplinary foot team experiences in using a hands-free single crutch as a novel therapy in the post-operative rehabilitation of diabetes related foot complaints**

Daina Walton[1]; Joanne Casey[1]; Chris Manu[1]; Prashanth Vas[1]; Christian Pankhurst[2]; Charlotte Hobbs[1]
[1]King's College Hospital NHS Foundation Trust; [2]Guy's and St. Thomas' NHS Foundation Trust

Aim: To report patient and health care practitioner (HCP) experiences in the use of a hands-free single crutch (HFSC) as a novel therapy in the post-operative rehabilitation of diabetes related foot complaints. This is a removable device that can be attached to the thigh and transmits weight through a flexed knee. This enables the individual to remain independently mobile and not bear weight through the injured foot.

Methods: Over 18-months, six inpatients chose to self-purchase an HFSC for use in their post-operative rehabilitation. These patients selected this device as it maintained their independence in mobility and was an alternative to the housebound, non-weight-bearing, microenvironment advised for their recovery. During inpatient therapy, an ability to mobilise along a 100-metre walkway with the HFSC was undertaken before discharge to ensure patient safety in mobilisation.

Results: Within this cohort, 83% were male, 67% had Type 2 Diabetes, age (mean±SD) 55±11 years and HbA1c (mean±SD) 81±26 mmol/mol. Pre-admission, all patients were fully weight-bearing independently except for one who was performing standing transfers only. The reason for admission were three elective reconstructions, two emergency minor lower extremity amputations and one for calcaneal osteomyelitis. For the 100 metre walkway test, four patients were independent in using the HFSC, one patient used the HFSC and two elbow crutches, and one patient was unable to use the HFSC with or without support. No falls were observed during their admissions. Five patients were discharged using the device. On outpatient follow up at 12 weeks, two continued to mobilise independently with the device.

Conclusion: This observational case series using the HFSC as a novel therapy requested by patients in the post-operative rehabilitation of diabetes-related foot complaints found mixed results. HCPs should be aware of its strengths and limitations.
