Novel Pneumatic Compression Device May Dilate Veins for Home Hemodialysis

Tej M. Singh, MD, MBA: Fist Assist Devices, LLC

Introduction

Technology & IP status

- Patented Technology includes:
  - External venous dilation
  - Intravenous pneumatic compression
  - Vascular compression
  - Intravenous and arterial patent

- IP protected through July 2022
- Clinical data ongoing

AV Fistulas

Fistulas are the preferred type of vascular access for hemodialysis: Fistula First Initiative

Study Site: Bangalore India

Vein Adaptation to Hemodynamic Forces

Fist Assist Device

Fist Assist Device: Single-Bellow Intermittent Compression on Fistula (2019)

1. Patented Intravenous Pneumatic Compression
2. Fist compression on the Fistula
3. More below elbow on shoulder
4. Easy application and easy monitoring
5. High patient compliance
6. 60 mm Hg for 20 seconds and cyclic

Clinical Efficacy Study 2017

- 53 Patient Fist Assist study
- 41 with Fist Assist and 12 as sham controls
- 1 and 3 month follow-up initially
- 6 hour application daily at patient by 60 mm Hg for 20 seconds and recycles
- Complications, patient compliance and vein measurement to be recorded
- Fistula start date recorded
- Fistula type noted and monitored

Methods

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Fist Assist device prefers to dilate forearm veins at higher Journal of Hemodialysis Access

Conclusions

- Early application of external intermittent pneumatic compression assists in AV fistula dilation
- Hemodialysis fistulas remain
- External devices may be important role in cost effective education, fistula maturation and clinical outcomes
- Help in vascular access selection
- Will improve patient education
- Pre-dialysis education studies
- Global fistula dilatation device
- Excellent results with fistula dilatations

ESRD “Fist Assist” Home Wearable Protocol

Stage 1: Vein Access & Stage 2: First Assist

Fist Assist Medical Device home wearable will increase significant venous return

Changing the Standard of Vein Dilatation

Fist Assist: A new Venous Dilation System: Single-Bellow Intermittent Compression on Fistula

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Fist Assist

Fist Assist is a novel venous dilation system that provides significant venous return to assist in fistula maturation and increased patient compliance in fistula dilatation.

www.f istassistdevices.com