First Time Data Release: LimFlow pDVA for No-Option CLTI: The Alps Registry Data at 2 Years

Andrej Schmidt, MD

Medical Department V - Angiology, University of Leipzig Medical Center, Germany

Disclosure

Speaker name: Andrej Schmidt

I have the following potential conflicts of interest to report: Consulting: Abbott, Bard/BD, Cook, Cordis, Reflow Medical, Upstream Peripheral

LimFlow System Purpose-Built for pDVA



LimFlow pDVA Procedure Case Example

65 years, male

Renal failure with chronic dialysisForefoot gangrene

- Several PTA-attempts

- Calcified foot-arteries



LimFlow pDVA Procedure Overview



LimFlow pDVA Procedure Overview





The ALPS Multi Centre

Purpose

 Retrospective evaluation of patients with no-option CLTI (NOP-CLTI) treated with the LimFlow procedure

Method

- Multi-centre (Alkmaar, Leipzig, Paris and Singapore)
- Multi-disciplinary centres with integrated wound care
- Consecutive patients treated with LimFlow device
- Performed by a variety of operators (Angiologist, IR, VC)
- 11 July 2014 to 11 June 2018

Study Design

Endpoints

Primary

• AFS @ 6 Months

Secondary

- Wound Healing
- Limb Salvage
- Survival

@ 6, 12, 24 Months

Inclusion/Exclusion Criteria

Inclusion:

- Rutherford 5/6
- No-Option CLTI (NOP-CLTI)

Exclusion:

- Acute limb ischemia
- Extensive tissue loss or infection which precluded limb salvage
- Known deep vein thrombosis

ALPS Patient Characteristics (n=32)

Baseline Characteristics (n = 32)		
Median Age (years)	67 ± 14	
Gender (Men)	63%	
SVS WIfl (High Risk)	78%	
Comorbidities		
Diabetes (Type II)	66%	
Renal Insufficiency	53%	
Dialysis Dependent	16%	
Immunosuppression	25%	



SVS WIfl Classification



ALPS Procedural Characteristics



Procedural Characteristics

Success Rate	97%

ALPS Amputation Free Survival (n=31)



ALPS AFS, Survival, Freedom From Amputation (n=31)



ALPS Complete Wound Healing



<u>Complete</u> Wound Healing

ALPS Average TcPO₂ Results

100 Statistically Significant Rise after 45 Days 80 TcPO2 (in mm Hg) 60 40 0 20 0 0 Pre-op 1 to 15 16 to 30 31 to 45 46 to 60 61 to 90 91 to 150 151 to 300 301 to 600 >600 Time (in days)

142 TCPO2 measurements

~10 measurements/patient

Conclusion

- This is the *largest study of NOP-CLTI patients treated with LimFlow* showing mid and long-term results
- In this complex group of patients, high technical success and AFS rates up to 24 months are achieved
- Wound healing achieved in majority of patients previously destined for limb loss
- Perfusion indices (TCPO2) show significant increases.
- In selected patients with NOP-CLTI, pDVA, when performed in dedicated centres, could be a recommended treatment to prevent amputation and heal wounds

Participating Centers / Authors

- Michiel A. <u>Schreve</u>, MD, Department of Surgery, Northwest Clinics, Alkmaar, The Netherlands
- Eline <u>Huizing</u>, MD, Department of Surgery, Northwest Clinics, Alkmaar, The Netherlands
- Costantino <u>Del Giudice</u>, MD, Department of Interventional Radiology, Hôpital Européen Georges Pompidou, Paris, France
- Daniela <u>Branzan</u>, Department of Vascular Surgery, University Hospital, Leipzig
- **Çağdaş** <u>Ünlü</u>, MD, PhD, Department of Surgery, Northwest Clinics, Alkmaar, The Netherlands
- Ramon L. <u>Varcoe</u>, MBBS, MS, FRACS, PhD, Prof, Department of Surgery, Prince of Wales Hospital and University of New South Wales, Randwick, Australia
- Roberto Ferraresi, MD, Peripheral Interventional Unit, Humanitas Gavazzeni, Bergamo, Italy
- Steven <u>Kum</u>, MMBS, FRCS, Vascular Service, Department of Surgery, Changi General Hospital, Singapore