

The logo for LINC (Lung and Intensive Care Network) features a stylized, colorful graphic of a lung or vessel in shades of red, orange, and blue, with the letters "LINC" in white to its right.

LINC



Let's do it together: experience the future of “medicine in virtual reality”.

Prof. Enrico Maria Marone

Associate Professor of Vascular Surgery

School of Medicine and Surgery

University of Pavia

Fondazione IRCCS Policlinico San Matteo – Pavia

Disclosure

Speaker name:

Prof. Enrico Maria Marone

I have the following potential conflicts of interest to report:

- Consulting
 - Employment in industry
 - Stockholder of a healthcare company
 - Owner of a healthcare company
 - Other(s)
-
- I do not have any potential conflict of interest

Introduction

15th December 2017

- First interactive lesson of Vascular Surgery
- The surgeon performing the operation explained each step of it during visualization
- A questionnaire testing the comprehension level was submitted before and after the procedure

Introduction

ANSWERS FROM MEDICAL STUDENTS AFTER VR LECTURE

QUESTION	A	B	C	D
1	1	1	100 (98%)	-
2	101 (99%)	1	0	0
3	48	3	48 (47%)	3
4	98 (96%)	0	4	-
5	1	0	97 (95%)	4
6*	102/102 (100%)	98/102 (96%)	101/102 (99%)	98/102 (96%)
7	0	6	96 (94%)	-
8	98 (96%)	4	0	-
9	7	6	89 (87%)	-
10	0	2	2	98 (96%)
11	92 (90%)	3	7	0

Virtual Reality Glasses



Case report

- Female, 69 yo
- Aug. 2017: endovascular recanalization RT popliteal and AT arteries for CLI
- Jan. 2018: onset of intermittens claudication RT lower limb
- At duplex scan occlusion RT SFA
- Surgical strategy: endovascular recanalization with DCB (Cardionovum Legflow 6x150)

Video features

- Video was achieved with Orah 4i Live Spherical VR Camera.
- Featuring: 4 image sensors, 4 lenses, and 4 high-frequency range microphones.
- The Orah 4i recorded 4K video at 30 fps for an immersive spherical video experience.
- Editing and post on the 360° degrees files was done by the Adobe Premiere Pro CC 2017 platform and his VR skills.

Conclusions

- LEGFLOW 018 is a winning mix between support and low profile (5F)
- LEGFLOW can be handle easily as a plain balloon
- The stability of the SAFEPAX[®] coating generates a relaxed working environment with LEGFLOW[®]. We don't need to rush to reach the lesion since paclitaxel leakage is minimised

Conclusions

- VR grants the possibility to a wide number of students to follow surgical interventions without putting the success of the procedure at risk
- It allows to respect patients' safety and privacy
- Wider use of this technology in surgical education should be encouraged