

## Results And Benefits Of the CELT ACD Closure Device In The Office-Based Laboratory And The Hospital

**Joseph J. Ricotta II MD, MS, DFSVS, FACS**

National Medical Director of Vascular Surgery and  
Endovascular Therapy  
Tenet Healthcare

Professor of Surgery  
Program Director, Vascular Surgery Fellowship  
Charles E. Schmidt College of Medicine  
Florida Atlantic University



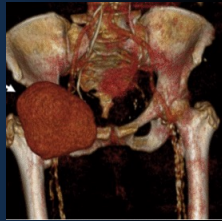
## DISCLOSURES

- Nothing to Disclose



## Manual Compression/Arterial Closure Devices

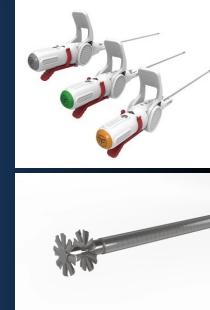
- Manual Compression remains the gold standard for achieving hemostasis
- It requires prolonged bed rest (4-6hrs) and 20-30 minutes or more of compression to achieve hemostasis
- Current arterial closure devices still require prolonged bed rest (2hrs) and are associated with significant access complications
  - Hematoma
  - Pseudoaneurysm
  - RP Bleeding
  - Blood Transfusion Requirement
  - AV Fistula
  - Arterial Thrombosis



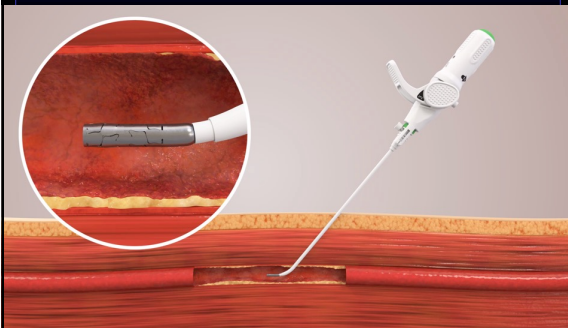
## THERE HAS TO BE A BETTER WAY....

The CELT ACD is a novel femoral access closure device that has been shown to:

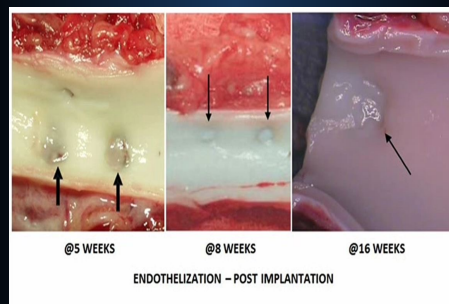
- reduce complication rates
- allow rapid hemostasis
- reduce time to ambulation and discharge



## CELT ACD CLOSURE DEVICE



## Celt ACD® in Arterial Wall NOT in Circulation



ENDOTHELIALIZATION - POST IMPLANTATION



### CELT Clinical Experience

- Prospective single arm study
- N = 442 patients
- Antegrade & Retrograde - 5 – 7F
- Mean CFA diameter 7.7mm ± 1.2mm
- 100% Heparin, NO PROTAMINE REVERSAL
- 100% Ultrasound guidance of deployments
- 100% Technical success

TTH 12.1 seconds (± 13.2)  
TTA 17.1 minutes (± 5.2)  
TTD 31.7 minutes (± 8.9)

- 0% major, 2.3% minor complications

Journal of Vascular Surgery Cases, Innovations and Techniques  
Available online 4 March 2023, 101139  
In Press, Journal Pre-proof | What's this? >

Safety and Efficacy of the CELT ACD® Femoral Arteriotomy Closure Device in the Office-Based Laboratory



Ahmed K. Ghamraoui, DO, MS<sup>1</sup>, Jake Ferman, DO<sup>2</sup>, John Ricotta MD, DFPYS, FACS<sup>1</sup>, Joseph J. Ricotta II MD, MS, DFPYS, FACS<sup>1</sup>

ARTICLE HIGHLIGHTS

Type of Research: Prospective single-arm clinical study



Key Findings: Experience with the CELT ACD® femoral arteriotomy closure device in 442 patients undergoing peripheral angiography in an office-based laboratory demonstrated its safety and efficacy in this setting with no major complications occurring in this series.

Take Home Message: The CELT ACD® device significantly reduces time to ambulation and discharge in patients undergoing peripheral arterial intervention from a common femoral artery approach in the office-based laboratory setting.



### OUR CELT ACD EXPERIENCE

- 11/2021-11/2024- 3,649 CELT implants in both OBL and Hospital Setting 5Fr-7Fr
- 100% Technical Success-No Failed implants
- Full heparinization (80u/kg). NO Protamine reversal at case completion
- Avg Time to hemostasis = 11.8 sec
- Avg Time to Ambulation = 15 min
- Avg Time to Discharge = 27.8 min
- NO Major complications
- 0.6% Minor complications (Tract bleeding)

### OUR CELT ACD EXPERIENCE COMPARED TO OTHER CLOSURE DEVICES IN HOSPITAL SETTING

- Major Complication Rate  
Celt- 0% vs. Non-CELT- 6.8%
- Average PACU TIME  
Celt- 29.8 Min vs. Non-CELT- 167 min
- Average PACU COST  
CELT- \$563 vs. Non-CELT- \$3.156

### CELT ACD® System: Industry leading complication rates

	CELT	MANUAL	ANGIO SEAL	PERCLOSE PROGLIDE	STARCLOSE	MYNX	VASCADE
MAJOR BLEEDING	0.0%	1%	0.6%	0.6%	0.8%	0.7%	0.2%
HEMATOMA	0.6%	6.9%	5.5%	1.7%	3.0%	3.2%	0.9%
AVF	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%
PSA	0.0%	0.6%	0.2%	0.1%	0.1%	0.4%	0.9%
RETROPERITONEAL HEMORRHAGE	0.0%	0.3%	0.4%	0.2%	0.4%	0.4%	0.0%
LIMB ISCHEMIA / DVT	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.7%
INFECTION	0.0%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%
VASCULAR / SURGICAL REPAIR	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%	0.0%

CELT delivers consistent results across all metrics – spanning minor to major complications

### CONCLUSIONS-CELT ACD

- Significantly reduces time to hemostasis (12 sec) following percutaneous femoral artery intervention
- Significantly reduces time to ambulation (15 min) and discharge (<30min)
- Very low complication rate (tract bleeding)
- Reduces Overall Cost in Hospital Setting

