

**VEITHsymposium™ 2024**  
November 19, 2024

**Not So: Open Or Hybrid Repairs  
Are Best For Complex Juxtarenal  
Aortoiliac Occlusive Disease:  
Technical Tips**

**Y Tshomba**  
Department of Cardiovascular Sciences  
Chief of Vascular and Endovascular Units  
Vascular Surgery Recidency Program Director



Policlinico Universitario Fondazione Agostino Gemelli – Rome, Italy

**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**Disclosures**

I have the following potential conflicts of interest to report:

- Institutional research grant from Dr. Frantz Köhler Chemie GmbH
- Lecturer at symposia hosted by Cook, Inc., Bolton Medical, Jotec® s.r.l., Medtronic, Inc., W.L. Gore and Associates, Maquet Getinge Group & Dr. Frantz Köhler Chemie GmbH
- Consultant for Medtronic, Inc., Terumo Aortic & W.L. Gore and Associates
- Off-label discussion of the "in-vivo" use of crystalloids
- Off-label discussion of thoracic endovascular devices

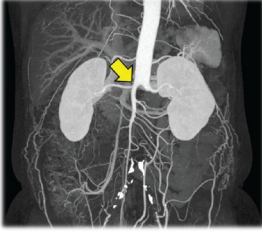
**NO**  
Receipt of honoraria  
Participation in a company sponsored speakers' bureau  
Employment in industry  
Shareholder in a healthcare company  
Owner of a healthcare company

Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**Juxtarenal Aortic Occlusion (JAO)**

- Challenging Anatomy
- Severe Symptoms
- Complex Patients
- Often Redo Procedures



Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

**Rome 2010-2024 Gemelli Hospital: JAO Experience**



Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**Fit Patients 2010-2024**

**96 Direct Open Aortic Procedures For JAO**

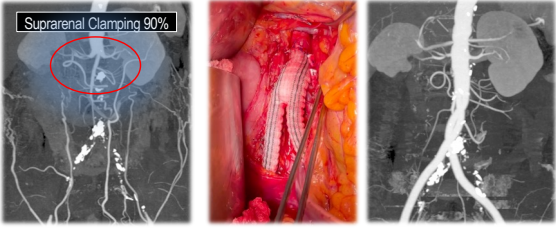
- 30-day mortality: 0%
- 5-years patency rates: 96%
- 30-day reinterventions: 4.2% (4 cases)
- Cardiac complications: 1.0% (1 case)
- Respiratory complications: 8.4% (8 case)

Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**1. Direct Index Aortic Surgery (50%)**

Suprarenal Clamping 90%




Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

### 2. Surgery After Failed Endo (30%)


Male, 64 yrs

- Leriche's Syndrome
- Totally Occluded CERAB
- Bilateral Hypogastric Arteries Occlusion
- Chronic Ischemic Colitis



Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

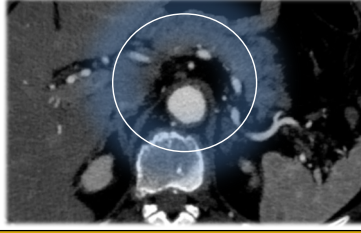

### Associated Selective Revascularisation Of Right Hypo



**Complete Recovery From Claudication & Ischemic Colitis**

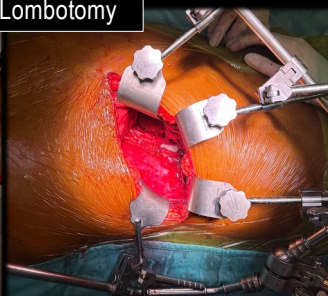
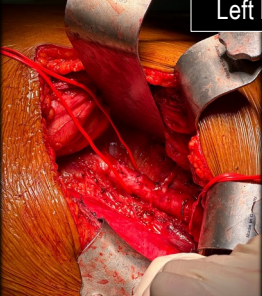
**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

### 3. Aortic "Coral Reef" (15%)

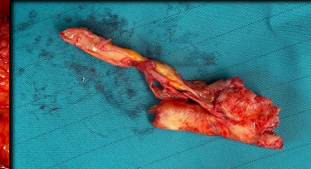
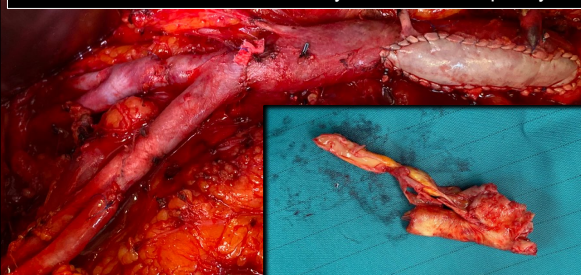


Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

### Left Lobotomy

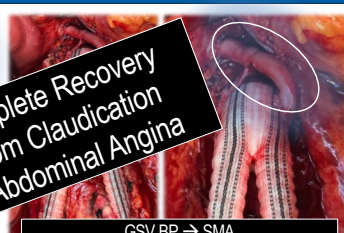



### Trans-Aortic Endarterectomy & Patch Aortoplasty



**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

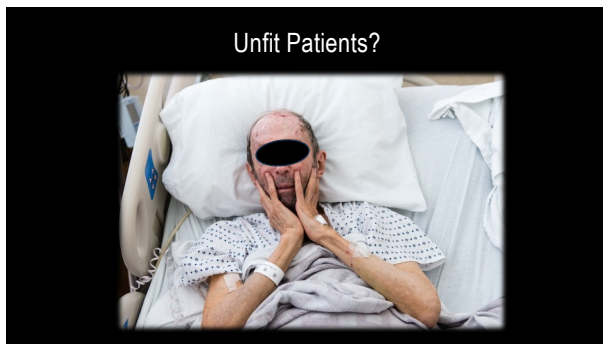
### 3. SMA & Renal Involvement (5%)



**Complete Recovery From Claudication & Abdominal Angina**

GSV BP → SMA      GSV BP → SMA

Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS



**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**Chimney Grafts In Stenting Of JAO**

Chimney grafts preserve visceral flow and allow safe stenting of juxtarenal aortic occlusion.  
Adel Bin Jabr, MD and Martin Malina, JVS 2013

**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**Lysis & CERAB**

Lysis and covered endovascular reconstruction of the aortic bifurcation (LA CERAB) technique for chronic juxtarenal aortic occlusion. D Minion, J Cardiovasc Surg 2023

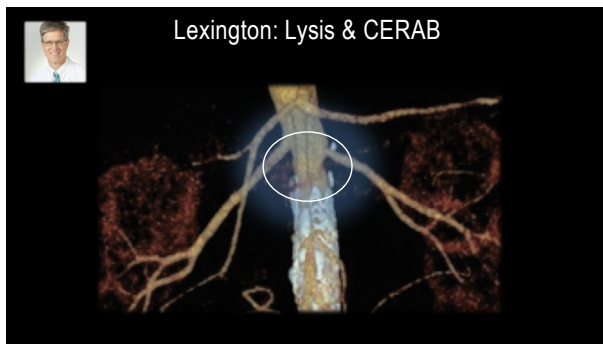


Two Very Distant Cities...


Lexington, KY, USA  
Rome, Italy

D Minion, J Cardiovasc Surg 2023  
Personal Series 2022

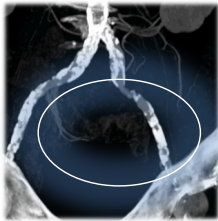
Lexington: Lysis & CERAB





What Is The Achilles Heel Of Totally Endovascular Approach?

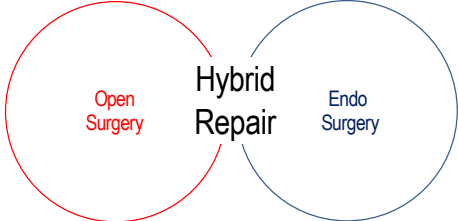
**Gemelli**  **CFA Involvement**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

Key point to indicate hybrid  
↓  
**Aorto-iliac occlusive disease  
with involvement of CFA**




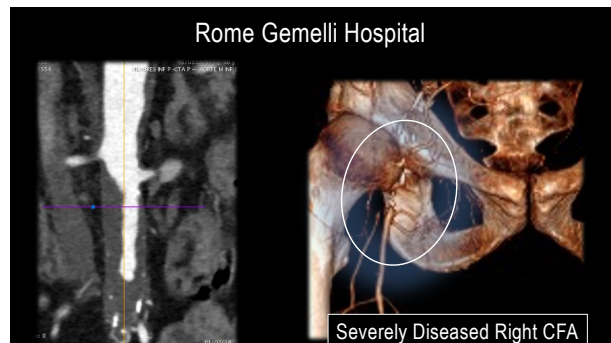
Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS 

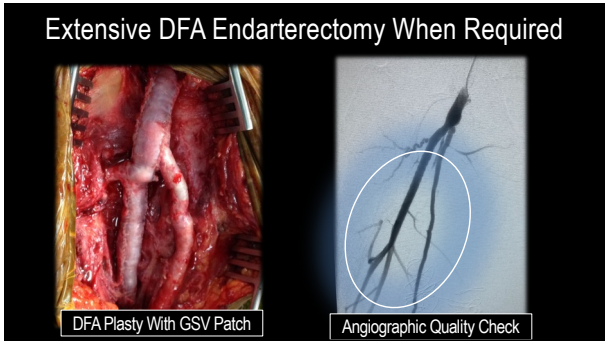
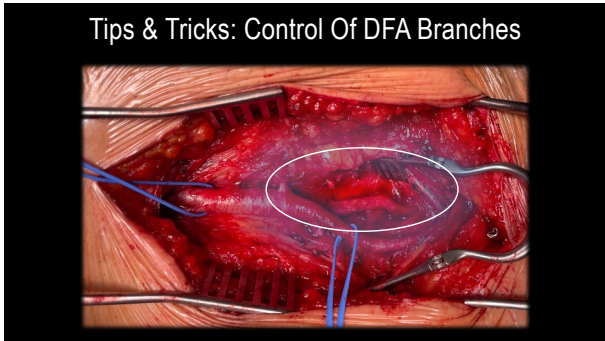
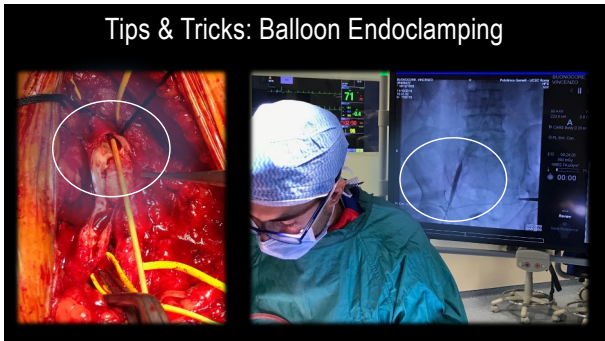
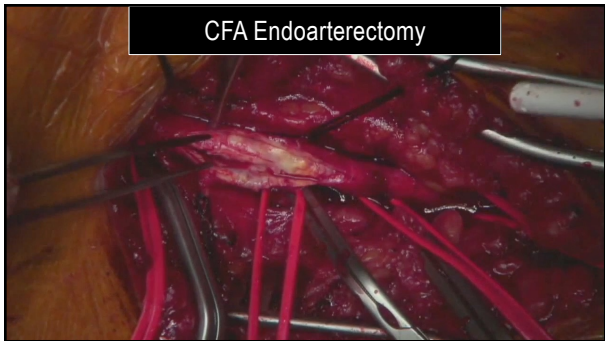
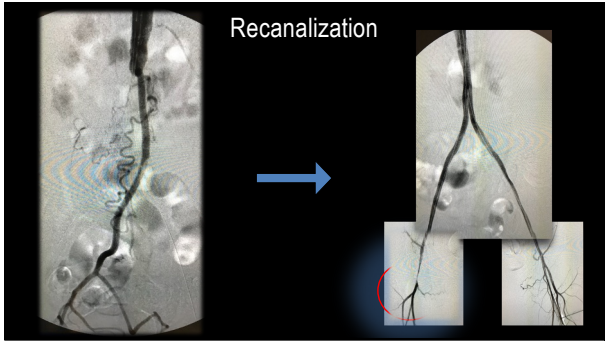
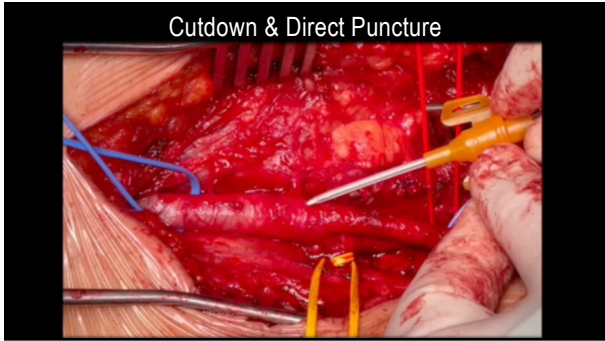
**Gemelli**  **“Hybrid Thinking”**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

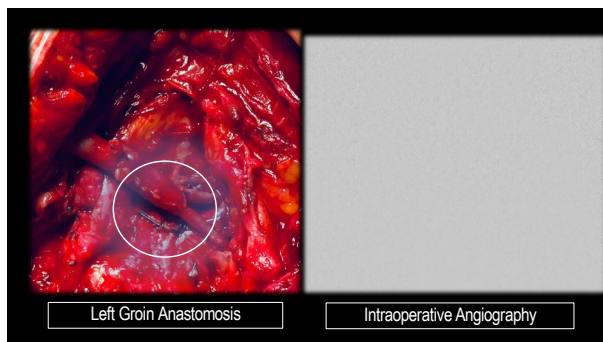
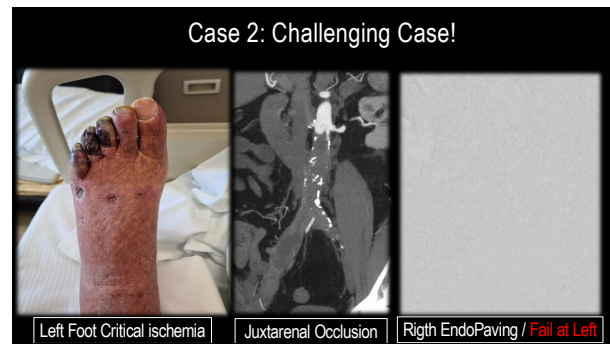
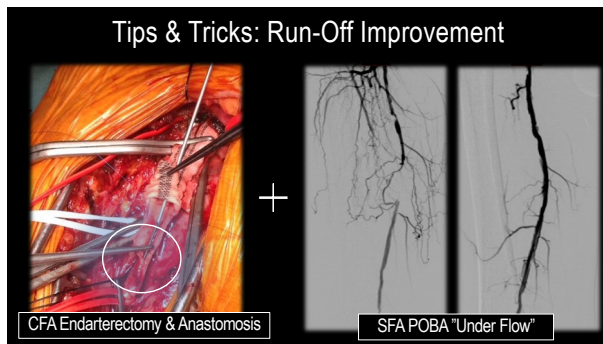


Open Surgery    Hybrid Repair    Endo Surgery

Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS 







**Gemelli** Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**Unfit Patients 2010-2024**

116 Hybrid Interventions For Aorto-Iliac Occlusive Disease  
(~ 40% With Femoral-To-Femoral BP)

- 30-day mortality: 0%
- 2-years Limb Salvage Rate: 94%
- 30-day reinterventions: 4.3% (5 cases)
- Respiratory & Cardiac complications: 2.7% (3 cases)

Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

**Gemelli** Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

**End Say: JAO In Fit Patients**

**Open Repair**

- Unmatched Patency Rates
- First Option In Young & Fit Patients

Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

**Gemelli**  
Fondazione Policlinico Universitario A. Gemelli  
Università Cattolica del Sacro Cuore

### JAO In Unfit Patients

#### Hybrid Repair

- Less Invasive Compared To Pure Open Surgery
- Higher Patency Compared To Pure Endovascular Surgery
- **When CFA Is Involved It Should Be The First Option**

Università Cattolica del Sacro Cuore – Fondazione Policlinico Gemelli IRCCS

Thank You!

**Aortic Gemelli Team** **CHIRURGIA VASCOLARE** **Vascular Team Gemelli**

Waiting For You In Roma - May 22-24, 2025!

**UCBM**  
UNIVERSITÀ CAMPUS BIO-MEDICO DI ROMA

**UNIVERSITÀ CATTOLICA**  
del Sacro Cuore

**SAPIENZA**  
UNIVERSITÀ DI ROMA

**TOR VERGATA**  
UNIVERSITÀ DEGLI STUDI DI ROMA

**ROMA VASCULAR FORUM**

MAY 22-24, 2025  
Fondazione Policlinico Gemelli

SAVE THE DATE

ingresso a pagamento: € 400,00  
Welfare Cardholder d'Ateneo: € 100,00  
Welfare Cardholder d'Ateneo: € 100,00