



Comparison of the axillary-atrial versus axillary-iliac arteriovenous grafts for hemodialysis

Dr. Gabriel López Peña

Instituto Nacional de Ciencias Médicas y Nutrición
Salvador Zubirán
México City

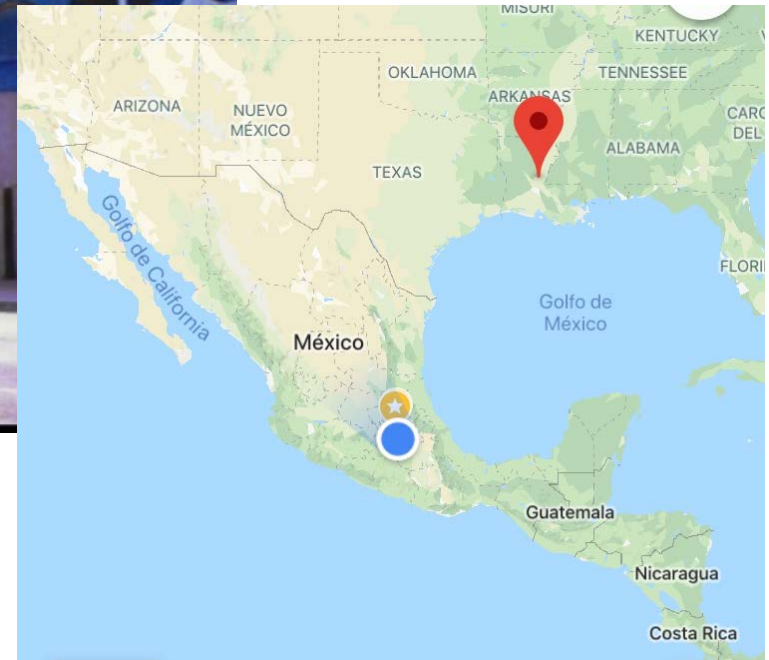


Comparison of the axillary-atrial versus axillary-iliac arteriovenous grafts for hemodialysis



- Non Disclosure agreement.
- Non conflict of interest.

INCMNSZ



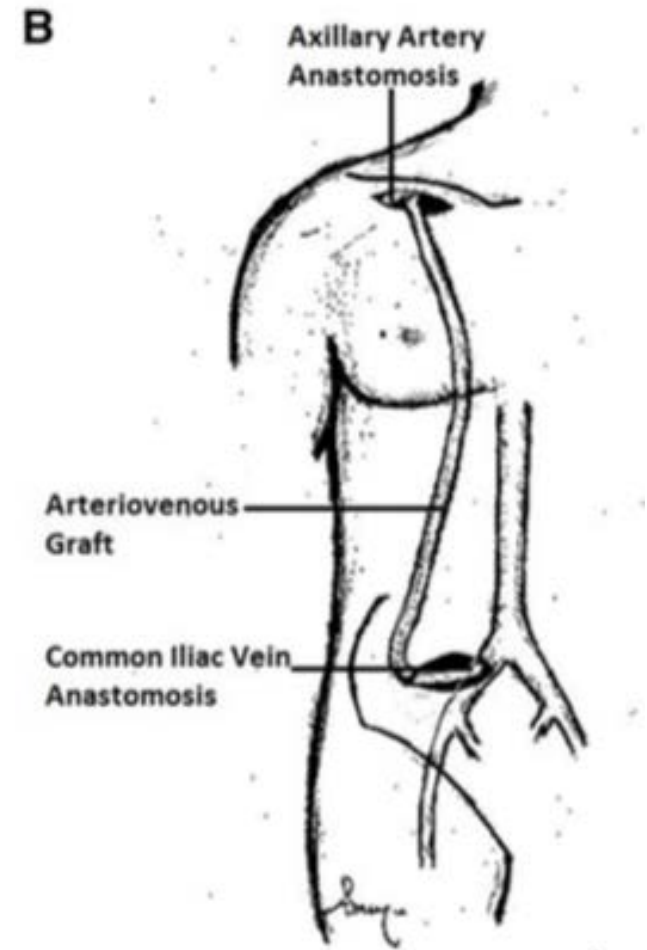
Introduction

- High incidence of ESRD patients requiring hemodialysis access.
- High incidence of central venous occlusion.
- Remains challenge for the access surgeon.



Axillo-iliac arteriovenous hemodialysis graft creation with an early cannulation device

- 8 grafts in 8 patients.
- Technical success in 100%.
- All grafts were patent immediately after placement.



Axillo-iliac arteriovenous hemodialysis graft creation with an early cannulation device

Table 1 Patient's demographic comorbidities

	Number	(%)
Patient's age (years, standard deviation)	37 ± 10	–
Male gender	6	75
Type 2 diabetes mellitus	1	12
Arterial hypertension	5	62
Coronary artery disease	0	0
Dyslipidemia	0	0
Thrombophilia	0	0

Axillo-iliac arteriovenous hemodialysis graft creation with an early cannulation device

Table 2 Axillo-iliac arteriovenous graft complications

	Number	(%)
Hematoma	3	37
Infection	2	25
Thrombosis	5	62
Steal Syndrome	0	0
Venous Hypertension	0	0
Pseudoaneurysm formation	0	0
High-output heart failure	0	0

Axillary-atrial grafts

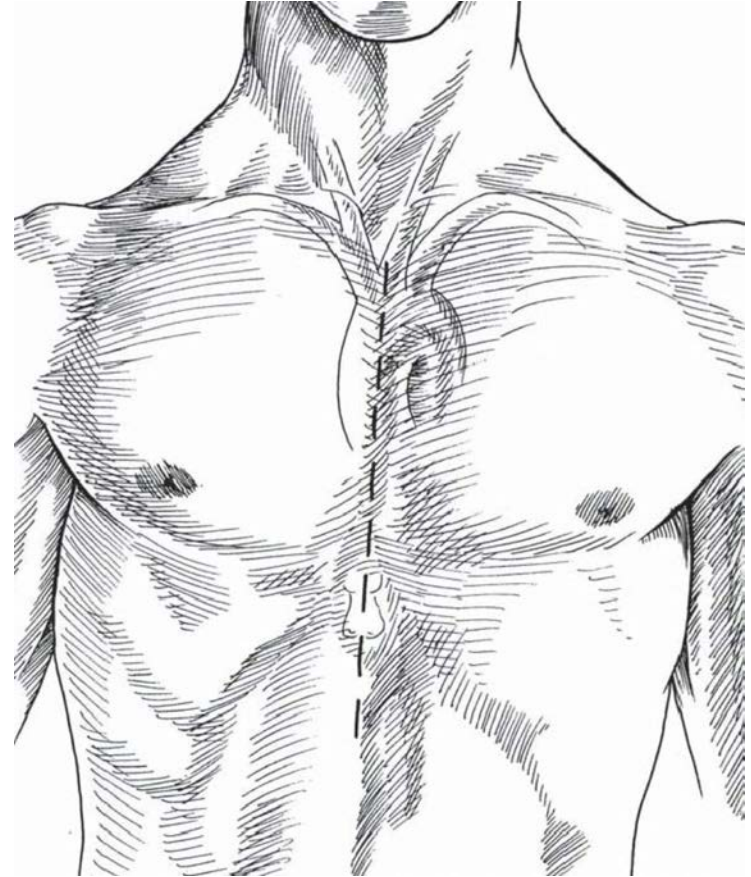
- Intrathoracic venous occlusion
- High rates of complications in lower extremities grafts.
- Preserving iliac vessels for transplant.
- Complex AVG configuration.

Axillary Artery to Right Atrium Shunt for Hemodialysis Access in a Patient with Advanced Central Vein Thrombosis: A Case Report

David Kopriva, MDCM, FRCS(C),¹ and Ahmad Moustapha, MD, FRCS(C),² Regina, Canada

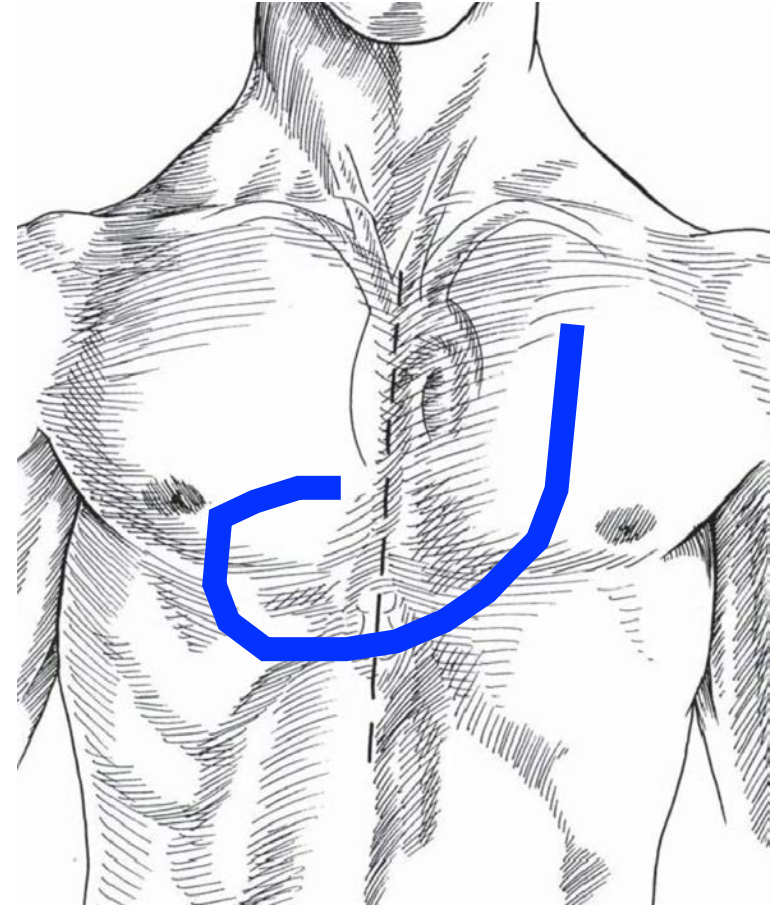
Axillary-atrial grafts

- Infraclavicular axillary artery approach.
- Midline sternotomy
- Side-biting clamp of the right atrial appendage.

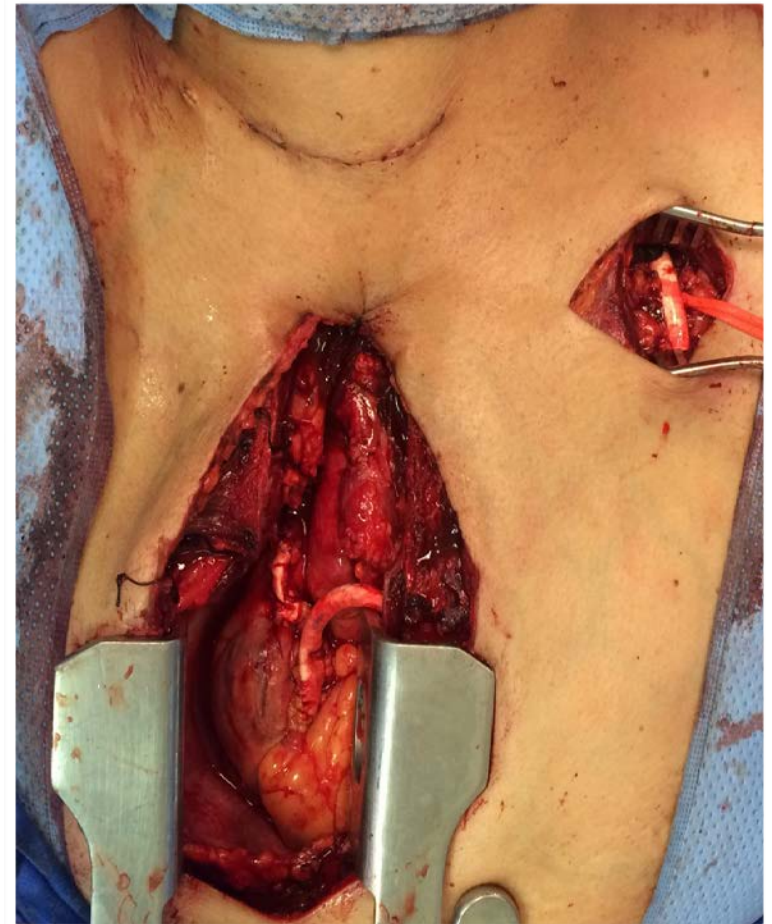
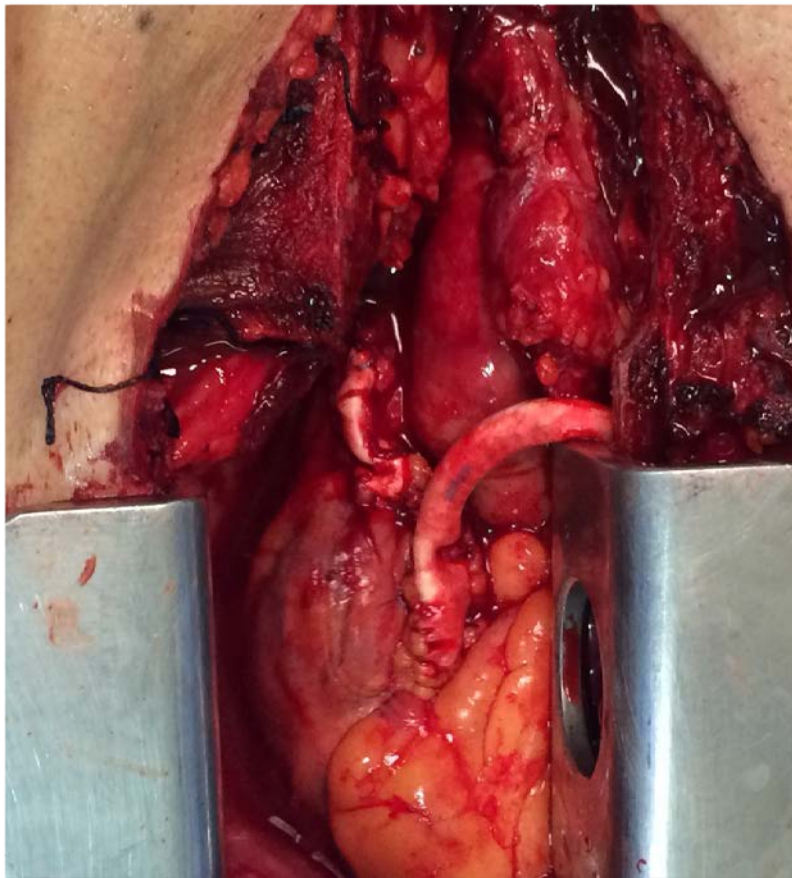


Axillary-atrial grafts

- We used early cannulation FlixeneTM graft.
- Graft tunneled in the anterior chest wall.
- End to side anastomosis.



Axillary-atrial grafts



Axillary-atrial grafts

- Total of 4 axillary-atrial grafts were implanted

	Number	(%)
Age	43 ± 13.4	-
Male	2	50
Type 2 Diabetes	3	75
Arterial Hypertension	4	100
CAD	0	0
Dyslipidemia	0	0
Thrombophilia	0	0

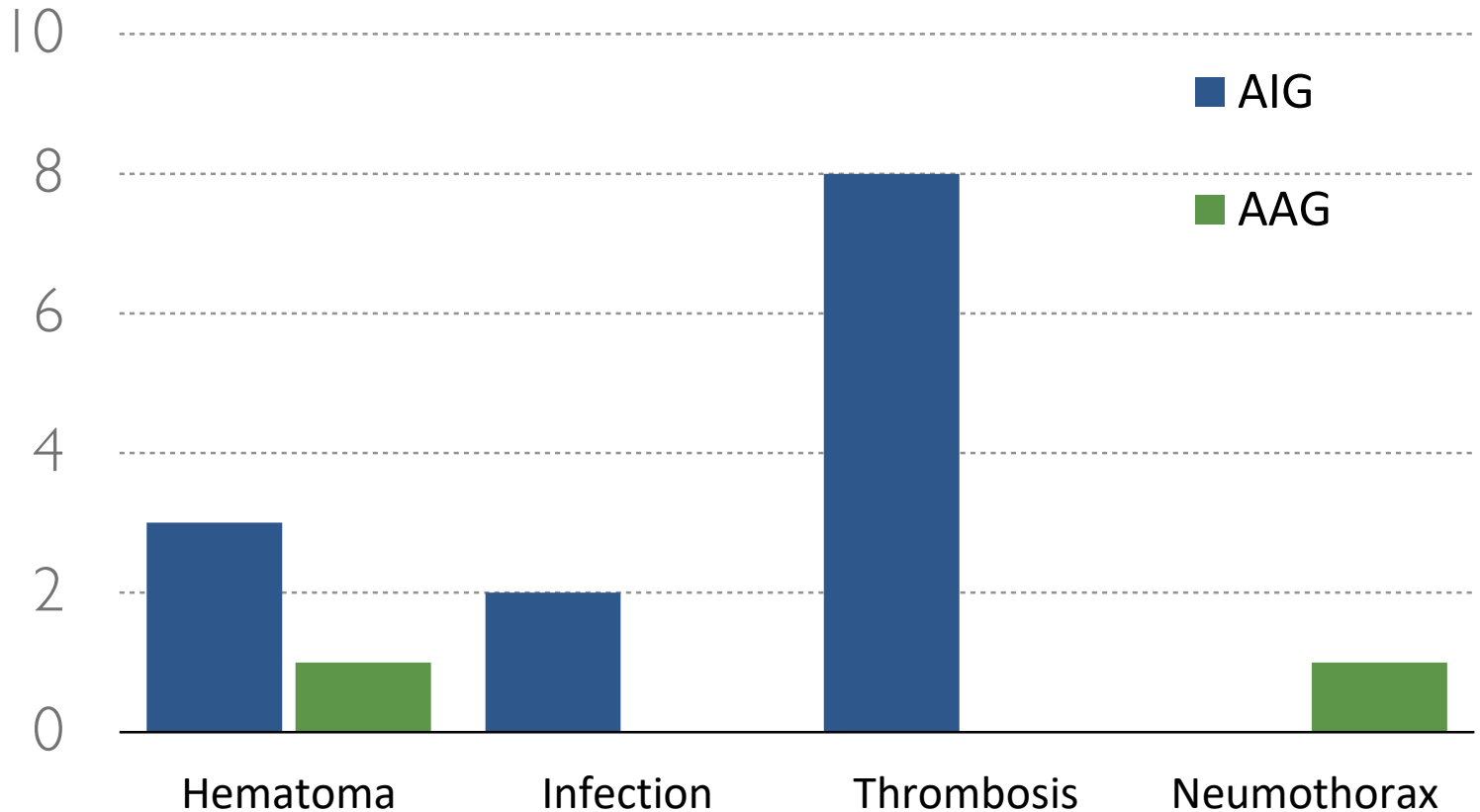
Axillary-atrial grafts

	Number	(%)
ICU Stay (hrs)	30 ± 22	-
Length of hospital stay (days).	9 ± 2	-
Drainage	4	100
General Anesthesia	4	100
Mortality	0	0
Functional access	3	75

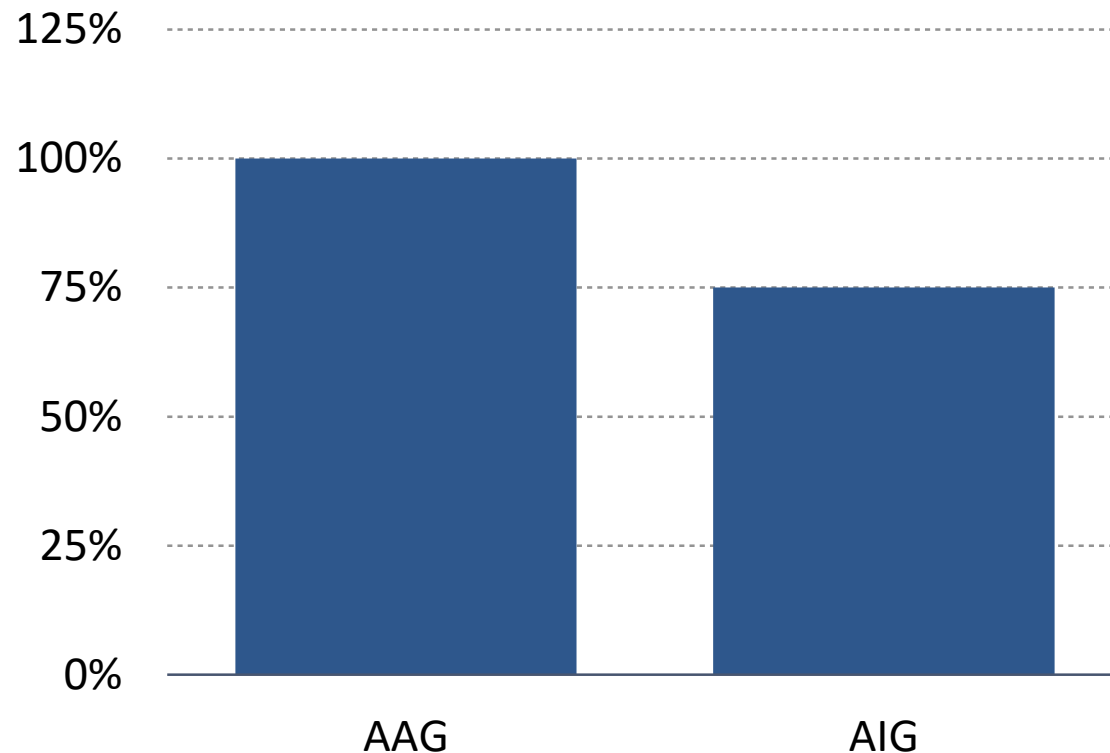
Axillary-atrial vs axillary-iliac grafts

Complications

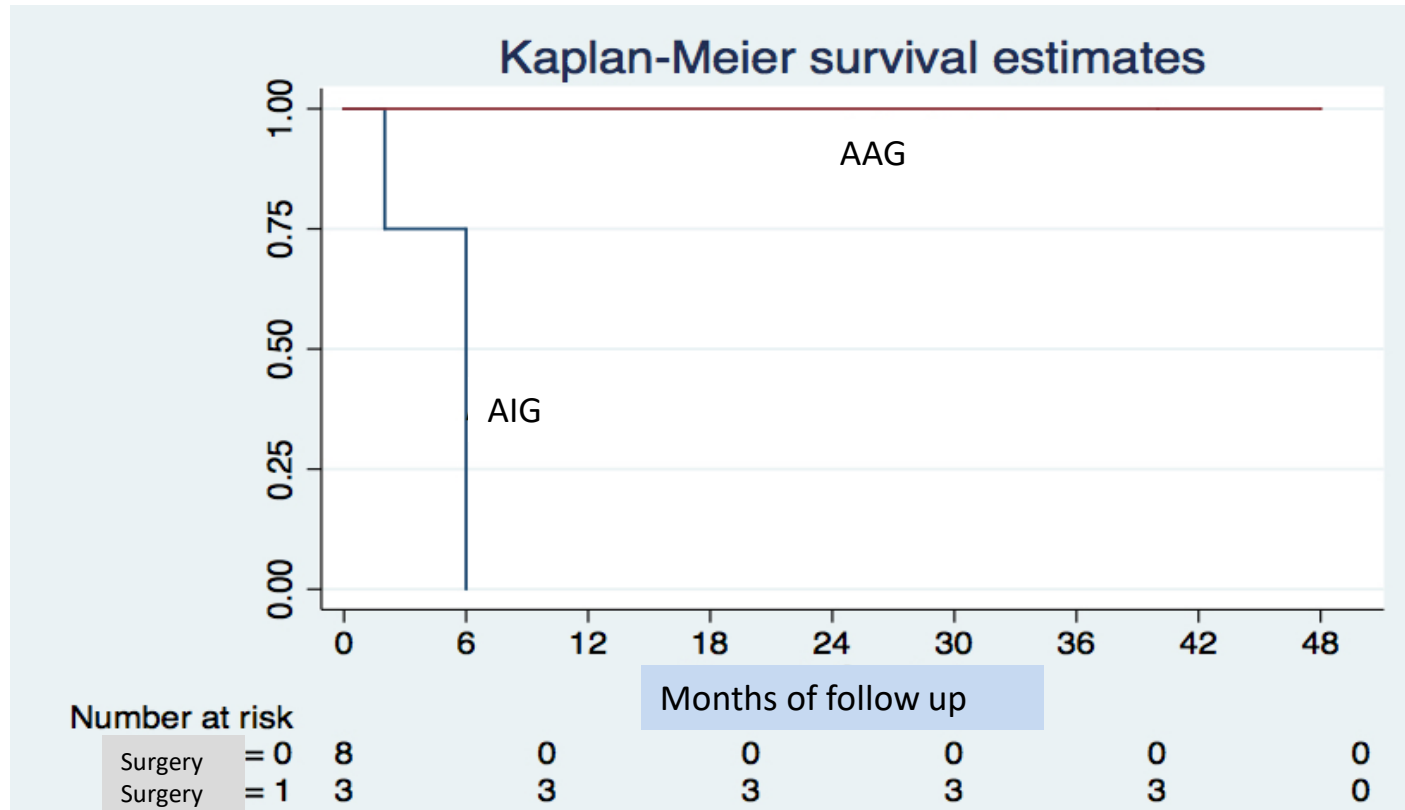
- Four AAG vs Eight AIG



Axillary-atrial vs axillary-iliac grafts 6 months secondary patency



- Primary patency of the AAG was 33 months



Conclusions

- Central venous occlusion remains a challenge for the access surgeon.
- Acceptable primary and secondary patency, low complications rate of AAG.
- Axillary-atrium graft is an access option for selected patients.