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Surgical removal of infected aortic grafts and stent-grafts after treatment of infrarenal aortic aneurysms

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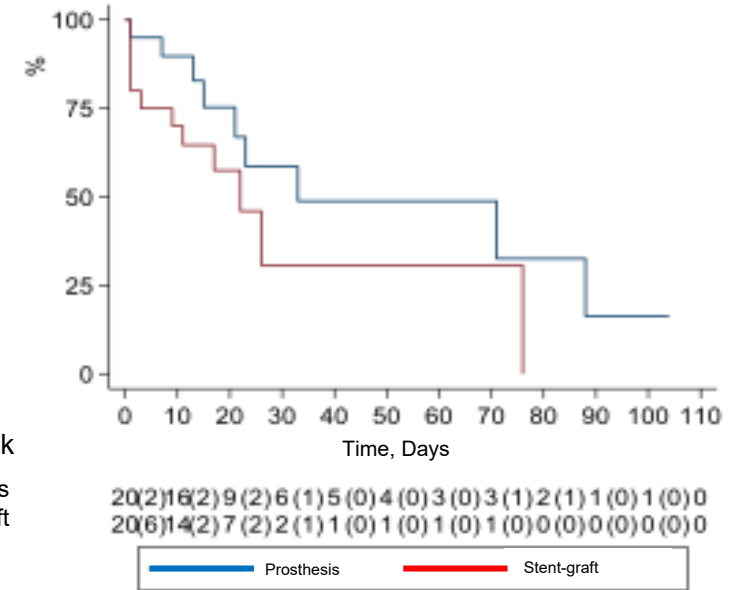
OBJECTIVE and METHODS

- Retrospective monocentric review (2006 – 2019) - initial treatment of infra-renal AAA
- *In situ* reconstruction using CAA (Cryopreserved arterial allograft)
- **To compare In-hospital mortality of surgically explanted infra-renal iEVAR *VS* infra-renal iOAR**
- Primary outcome : In-hospital Mortality
- Secondary outcomes : 30-day mortality, overall survival, postoperative morbidity
- Survival rates / Univariate analysis / Propensity score

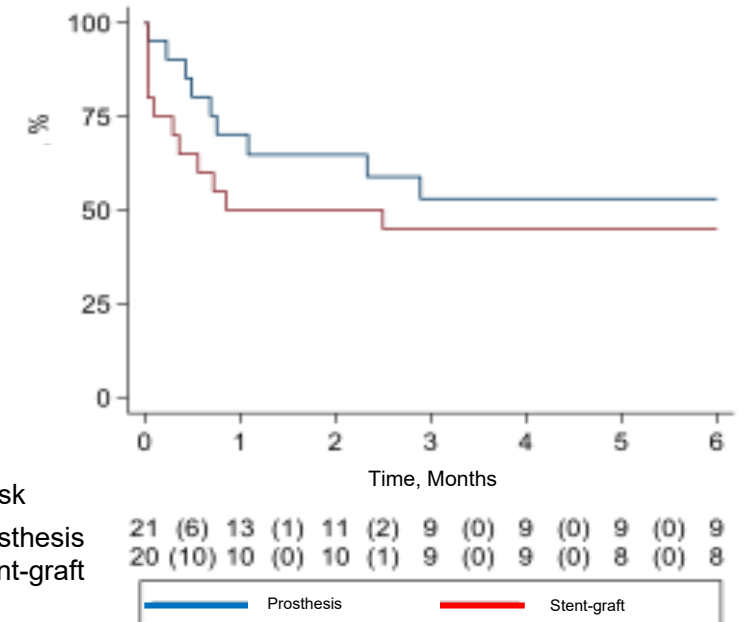
RESULTS - Outcomes

	iOAR	iEVAR	
	N=21	N=20	p-value
In-hospital mortality	9 (42.86%)	11 (55.00%)	0.437
30-d Mortality	6 (28.57%)	10 (50.00%)	0.160
Overall Mortality	10 (47.62%)	11 (55.00%)	0.636
Severe complication	5 (26.32%)	5 (25.00%)	0.999
Reintervention	10 (47.62%)	10 (50.00%)	0.879

In-Hospital Survival



Overall Survival



Univariate analysis

Predictors of in-hospital death

- Risk Factors :
 - **Age > 65 years** (OR 5.54 CI 95% 1.01 - 30.49),
 - **Aorto-enteric fistula** (OR 4.25 CI 95% 1.05 - 17.20),
 - **Postoperative revision** (OR CI 9.6 95% 2.32-39.95) and the **number of postoperative revisions** (for one revision, OR 11.2 CI 95% 1.73-72.3; for 2 revisions OR 6.40 CI 95% 0.89-45.99; for >2 revisions OR 12.80 CI 95% 1.15-142.58),
 - **Major postoperative complication** (OR 17.10 CI 95% 1.89-154.84)
- Protective Factor :
 - **Long delay** between the operative decision and removal of infected material (OR 0.04 CI 95% 0.00-0.5)

RESULTS – Propensity score and regression

Treatment Weighting

In-Hospital Mortality	Coef.	P> z	[95% Conf. Interval]	
ATE	0.20	0.19	-0.09	0.48
Odds ratio	2.22		0.66	7.49
PO				
Matériel:				
OAR	0,36	0.001	0,15	0,58
EVAR	0,56	0.000	0,38	0,75

- If all the patients had received EVAR, the proportion of in-hospital deaths would be increased **by 0.20** [CI 95%: -0.09; 0.48] (p=.48).

CONCLUSION

- No significant difference between iOAR and iEVAR regarding the in-hospital mortality rate.
- Lack of number of endoprosthesis infection to be able to show differences.
- **Infection of EVAR is not yet a decision-making criterion even though it seems to be deadlier**