



UNIVARC | SOS FAV
UNITÉ VASCULAIRE RADIO CHIRURGICALE

**ALGORITHME CREATION DES ABORDS
VASCULAIRES
(et indications formelles des cathéters)**

SFAV Aix-En Provence, 1^{er} juin 2023

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RECOMMANDATIONS

« Fistula first » :

- Pas de KTC
- Anticiper !

Oui mais :

- Faut-il toujours faire une FAV ?
- Quand ?
- Quelle FAV ?



QUAND ?

- Anticiper pour éviter les KTC temporaires : inconfort, risque infectieux, risque vital, risque de sténose ou thrombose veineuse centrale.
- Mais : risque de dégradation de la FAV dans l'intervalle, surveillance contraignante, parfois perte de la FAV...
- Evaluation du « bon moment » : avec le néphrologue :
 - Créatininémie DFG : courbe évolution
 - Critères cliniques et biologiques : tolérance de l'IR
 - Cause de la néphropathie
 - Projet de greffe DV



PROJET DE GREFFE

- Donneur vivant ? Assez rapide, une FAV n'a pas de sens.
- Liste classique : délai 4 ans... choix de la veine : prévoir la suppression et l'*épargne du capital veineux* : donc : FAV distale, dorsale du pouce ou tabatière anatomique.





CAPITAL ARTERIEL

- ATCD FAV
- FDR cardio-vasculaires
- Coronarographie
- ATCD amputations



Examens artériels :

- Clinique : pouls, signes d'ischémie
- ED (pressions distales Systoe)
- Artériographie (lésions proximales, possibilité TT endovasculaire?)



INDICATIONS FORMELLES DE KTC

Contexte : contre-indication à la FAV :

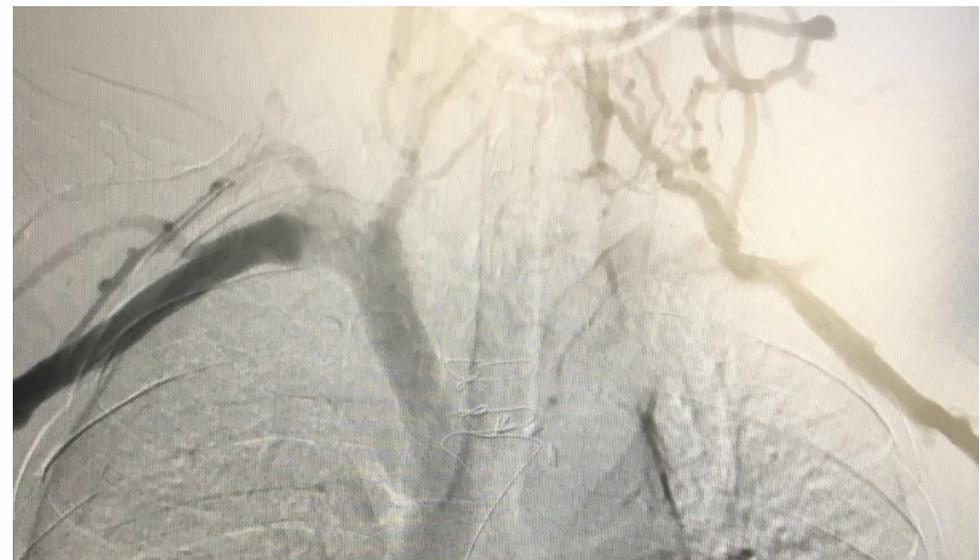
- jeune en attente d'une GDV,
- artériopathie majeure avec ATCD ischémiques sur FAV distale, selon l'espérance de vie.
- confort du patient âgé (difficultés techniques, échecs répétés, douleurs ponctions, fragilité tissulaire...)
- refus du patient

Bénéfice/Risque



CAPITAL VEINEUX

- Clinique : histoire, examen
- ED : indispensable
- Phlébographie (iode ou CO2) : en cas d'antécédents de FAV, de KTC prolongés, de PM... ou de doute sur l'ED et l'examen clinique.
- Clinique...





QUEL MONTAGE ?

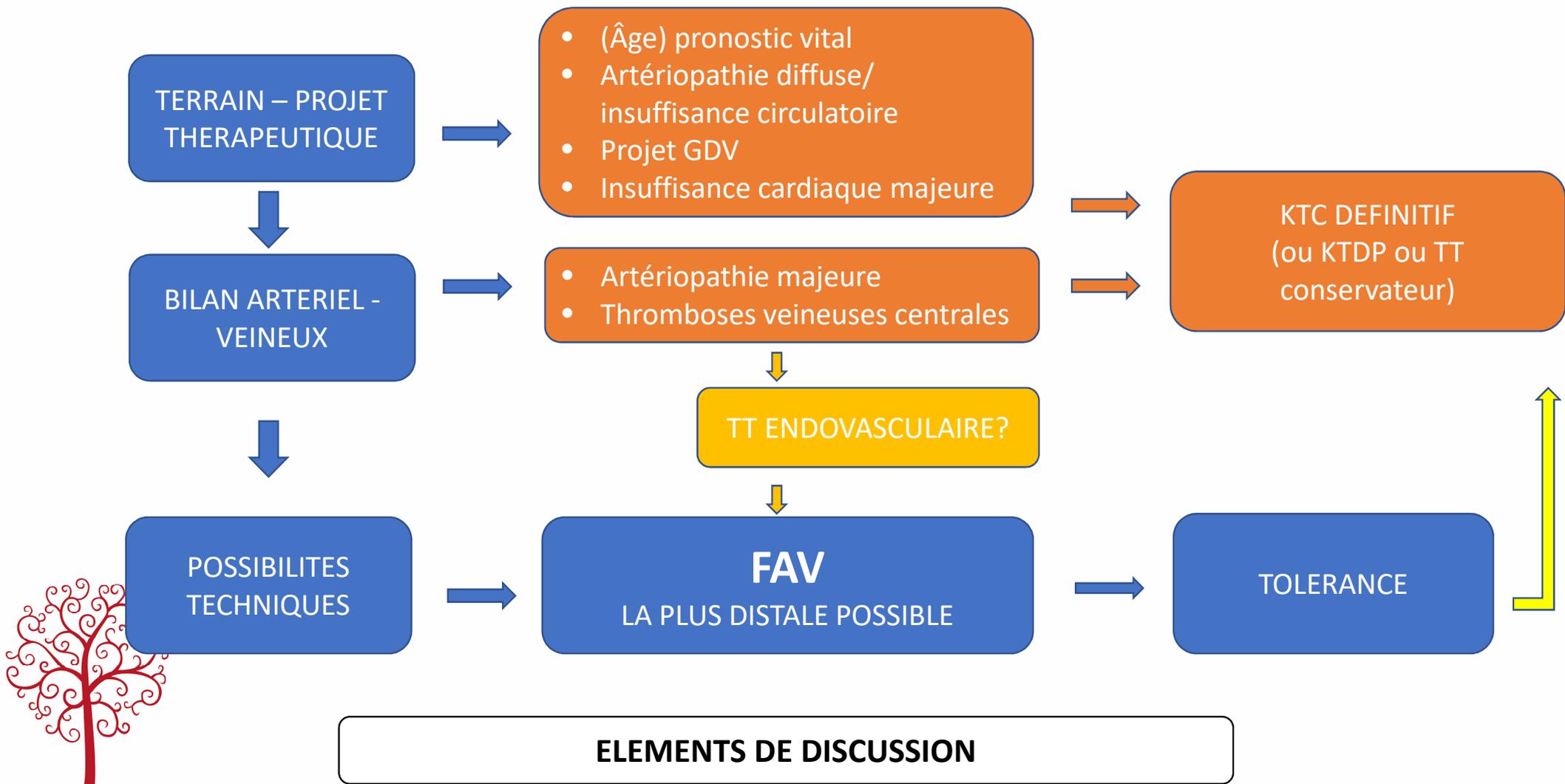
Toujours le plus distal possible : si besoin, nous pouvons réaliser un pontage, sans oublier la cubitale.

- Patient jeune (qui va être greffé?) : risque excès de débit, perte de capital veineux : très distale.
- Patient âgé : risque ischémique, perte autonomie et confort de vie : segment veineux de meilleure qualité (veine médiane de l'avant-bras) pour réduire le risque de reprise

- 1) Radio-céphalique
- 2) Ulna-basilique
- 3) Brachio-céphalique
- 4) Brachio-basilique
- 5) Pontage

Latéralité : critère secondaire





CONCLUSION

« PRIMUM NON NOCERE »

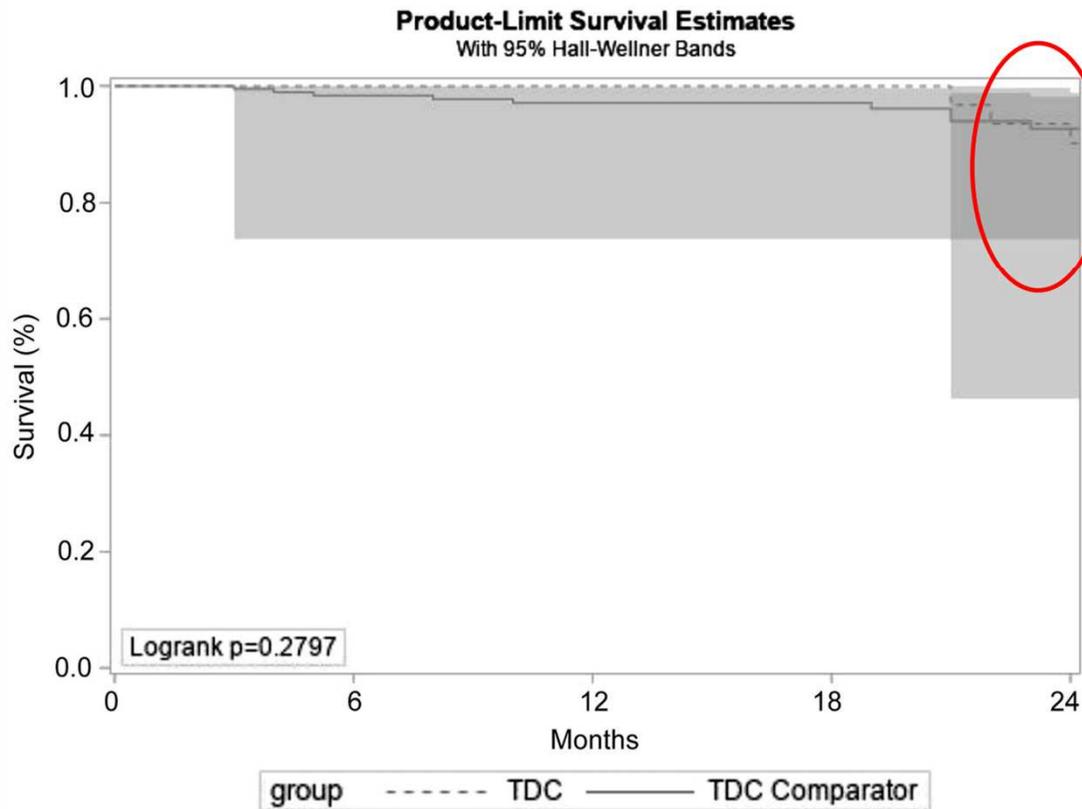
CAHIER DES CHARGES DE LA FAV :

- sécurité,
- durabilité,
- efficacité,
- confort



A photograph of a tropical landscape at dusk. The sky is a mix of light blue and pink, with a full moon visible in the upper right. In the foreground, there are several palm trees and other tropical vegetation. In the background, there are some buildings and a utility pole with a wire. The word "MERCI" is overlaid in the center of the image in a large, black, sans-serif font.

MERCI



Survie à long terme des patients avec KT tunnelisé

Etude rétrospective monocentrique (Boston)

KT > 180 jours

groupe KT : 50 patients

groupe contrôle : 200 patients

complications chez 46% des porteurs de KT dont :

- sténose veineuse centrale 33,4%
- infection 29,6%
- déplacement du KT 27,8%
- thrombose 7,9%

Castro V, *et al.* Reasons for long-term tunneled dialysis catheter use and associated morbidity. J Vasc Surg. 2021

Utilization, patency, and complications associated with vascular access for hemodialysis in the United States.

Arhuidese IJ, Orandi BJ, Nejim B, Malas M.

J Vasc Surg. 2018 Oct;68(4):1166-1174. doi: 10.1016/j.jvs.2018.01.049.

PMID: 30244924

Abstract

Background: This study examines the utilization and outcomes of vascular access for long-term hemodialysis in the United States and describes the impact of temporizing catheter use on outcomes. We aimed to evaluate the prevalence, patency, and associated patient survival for pre-emptively placed autogenous fistulas and prosthetic grafts; for autogenous fistulas and prosthetic grafts placed after a temporizing catheter; and for hemodialysis catheters that remained in use.

Methods: We performed a retrospective study of all patients who initiated hemodialysis in the United States during a 5-year period (2007-2011). The United States Renal Data System-Medicare matched national database was used to compare outcomes after pre-emptive autogenous fistulas, preemptive prosthetic grafts, autogenous fistula after temporizing catheter, prosthetic graft after temporizing catheter, and persistent catheter use. Outcomes were primary patency, primary assisted patency, secondary patency, maturation, catheter-free dialysis, severe access infection, and mortality.

Results: There were 73,884 (16%) patients who initiated hemodialysis with autogenous fistula, 16,533 (3%) who initiated hemodialysis with prosthetic grafts, 106,797 (22%) who temporized with hemodialysis catheter prior to autogenous fistula use, 32,890 (7%) who temporized with catheter prior to prosthetic graft use, and 246,822 (52%) patients who remained on the catheter. Maturation rate and median time to maturation were 79% vs 84% and 47 days vs 29 days for pre-emptively placed autogenous fistulas vs prosthetic grafts. Primary patency (adjusted hazard ratio [aHR], 1.26; 95% confidence interval [CI], 1.25-1.28; $P < .001$) and primary assisted patency (aHR, 1.36; 95% CI, 1.35-1.38; $P < .001$) were significantly higher for autogenous fistula compared with prosthetic grafts. Secondary patency was higher for autogenous fistulas beyond 2 months (aHR, 1.36; 95% CI, 1.32-1.40; $P < .001$). Severe infection (aHR, 9.6; 95% CI, 8.86-10.36; $P < .001$) and mortality (aHR, 1.29; 95% CI, 1.27-1.31; $P < .001$) were higher for prosthetic grafts compared with autogenous fistulas. Temporizing with a catheter was associated with a 51% increase in mortality (aHR, 1.51; 95% CI, 1.48-1.53; $P < .001$), 69% decrease in primary patency (aHR, 0.31; 95% CI, 0.31-0.32; $P < .001$), and 130% increase in severe infection (aHR, 2.3; 95% CI, 2.2-2.5; $P < .001$) compared to initiation with autogenous fistulas or prosthetic grafts. Mortality was 2.2 times higher for patients who remained on catheters compared to those who initiated hemodialysis with autogenous fistulas (aHR, 2.25; 95% CI, 2.21-2.28; $P < .001$).

Conclusions: Temporizing catheter use was associated with higher mortality, higher infection, and lower patency, thus undermining the highly prevalent approach of electively using catheters as a bridge to permanent access. Autogenous fistulas are associated with longer time to catheter-free dialysis but better patency, lower infection risk, and lower mortality compared with prosthetic grafts in the general population.



Feasibility and outcomes of native arteriovenous fistula in octogenarians

Anousone Daulasim, Pascal Seris, Catherine Maheas, Iulia Hude, Christophe Ridel, Maxime Touzot

PMID: 33210999 DOI: 10.5414/CN110128

Abstract

Introduction: While the native arteriovenous fistula (AVF) is the preferred dialysis access, it is a matter of debate for individuals older than 80 years due to reduced primary patency rates.

Materials and methods: We initiated a single-center, observational retrospective analysis of adult dialysis patients from January 2015 to December 2018. We included all patients older than 70 years with a minimum of 12 months of follow-up, beginning from the AVF creation. Patients were separated into two groups, octogenarians (> 80 years old) and controls (70 - 79 years old). The primary end point was the primary patency (the interval from arteriovenous access creation to the first intervention). The secondary end point were the complications at 3 months (failures of puncture, canceled dialysis sessions, local hematoma, AVF bleeding).

Results: 29 patients (octogenarian = 17, control = 12) were included in the analysis. The AVF radio-cephalic was the most common vascular access in each group. Primary patency was comparable between groups, but octogenarians required 40% more procedures to obtain or maintain patency. Overall, a functional AVF was obtained for all patients except in cases of complications such as hematomas, which were more frequent in octogenarians compared to controls (25 vs. 82%, $p < 0.01$). All catheters were removed at 6 months follow-up, with a median time to removal of 27 days (range 5 - 157 days).

Discussion: Despite a higher rate of interventions and local complications during the first 3 months, AVF and particularly radio-cephalic AVF, is a valid procedure for octogenarians, without lengthening the exposure time to the catheter.

