



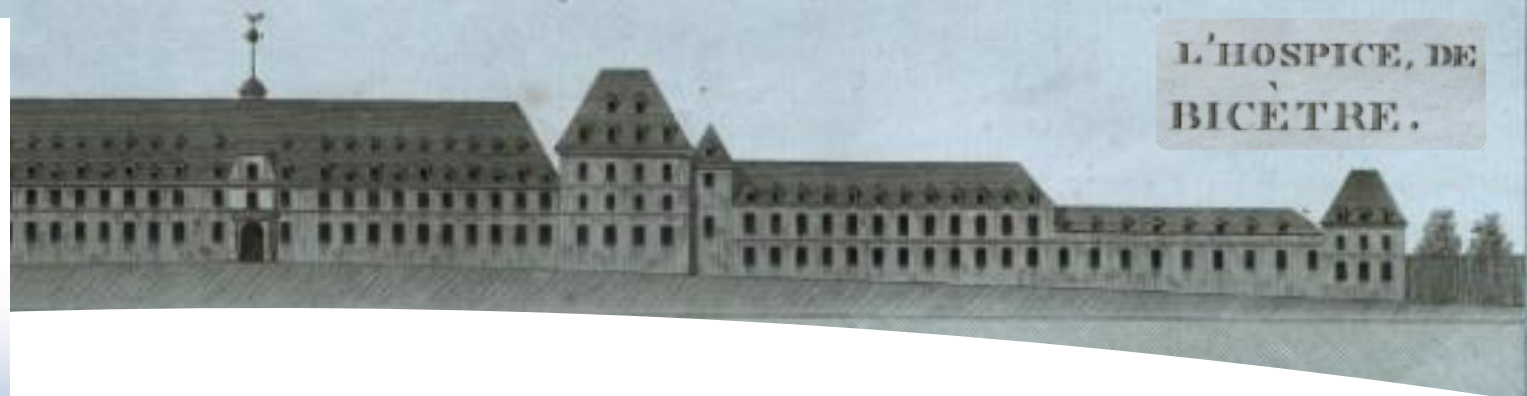
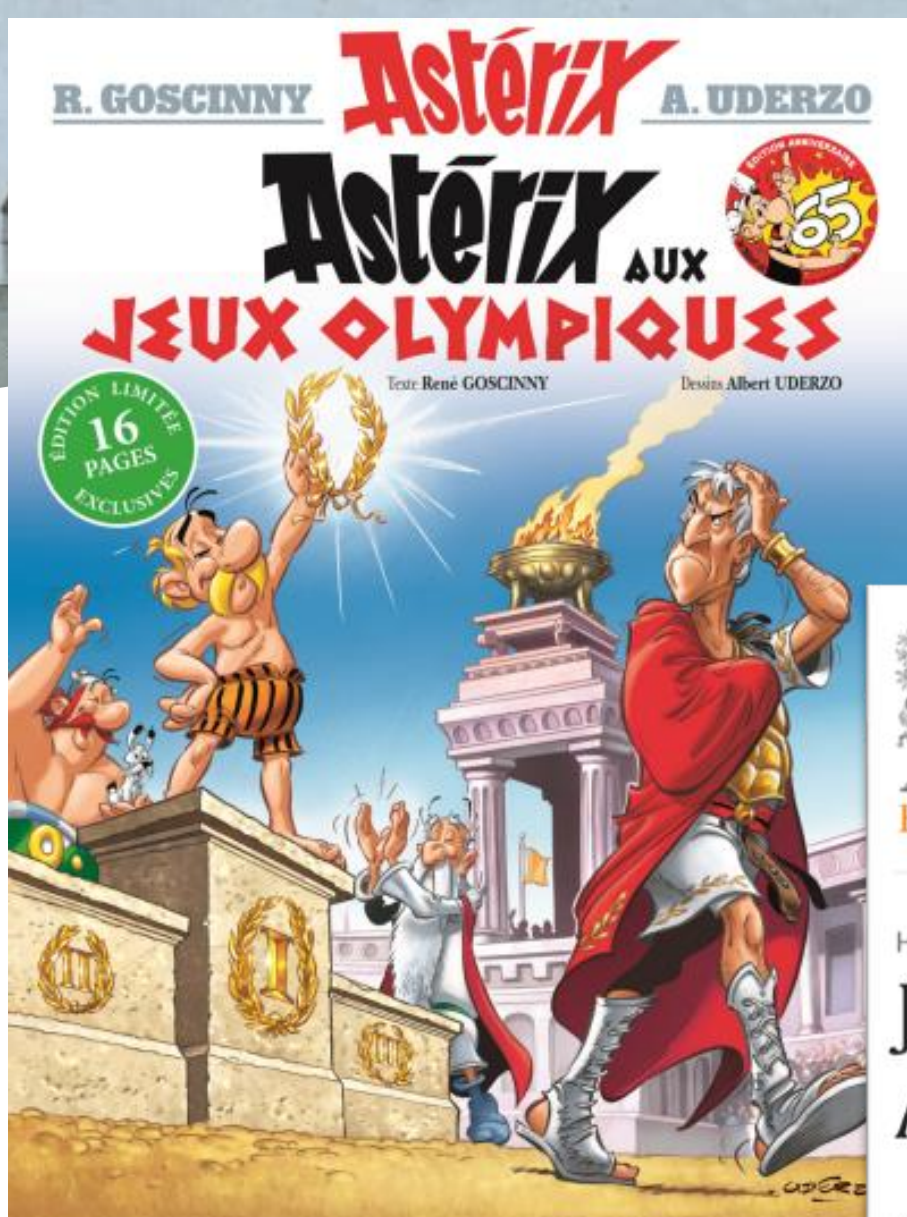
L'HOSPICE, DE  
BICÊTRE.

# Malformations Artério-Veineuses Cérébrales

**Dr. Jildaz Caroff, Pr Laurent Spelle**

*Hôpital Bicêtre, APHP, Paris*





## World Neurosurgery

Volume 84, Issue 6, December 2015, Pages 1985-1987



Historical Vignette

# Julius Caesar's Epilepsy: Was It Caused by A Brain Arteriovenous Malformation?

Nicola Montemurro<sup>1</sup>, Arnau Benet<sup>1</sup>, Michael T. Lawton<sup>1 2</sup>  

[Show more](#) 



Les malformations arterio-veineuses cérébrales (MAV) sont des **communications directes anormales** entre artères et veines au travers d'un nidus vasculaire

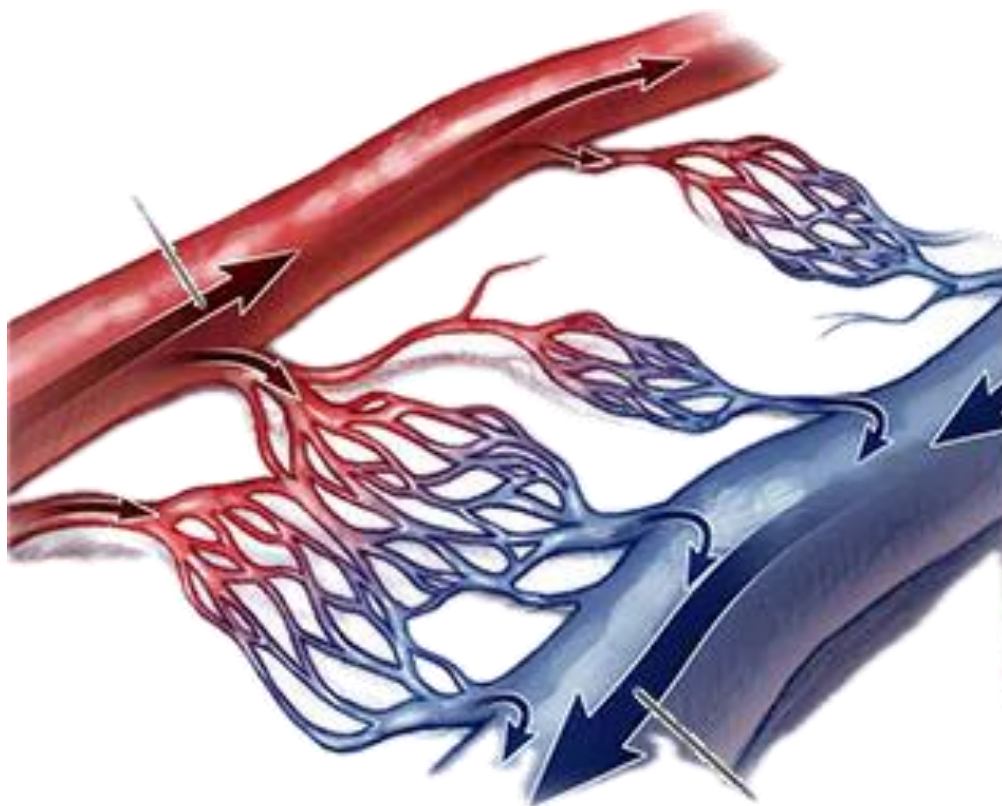
Les stratégies thérapeutiques sont variables et peu codifiées

Les **hémorragies** cérébrales et **l'épilepsie** sont les modes de présentation les plus fréquents

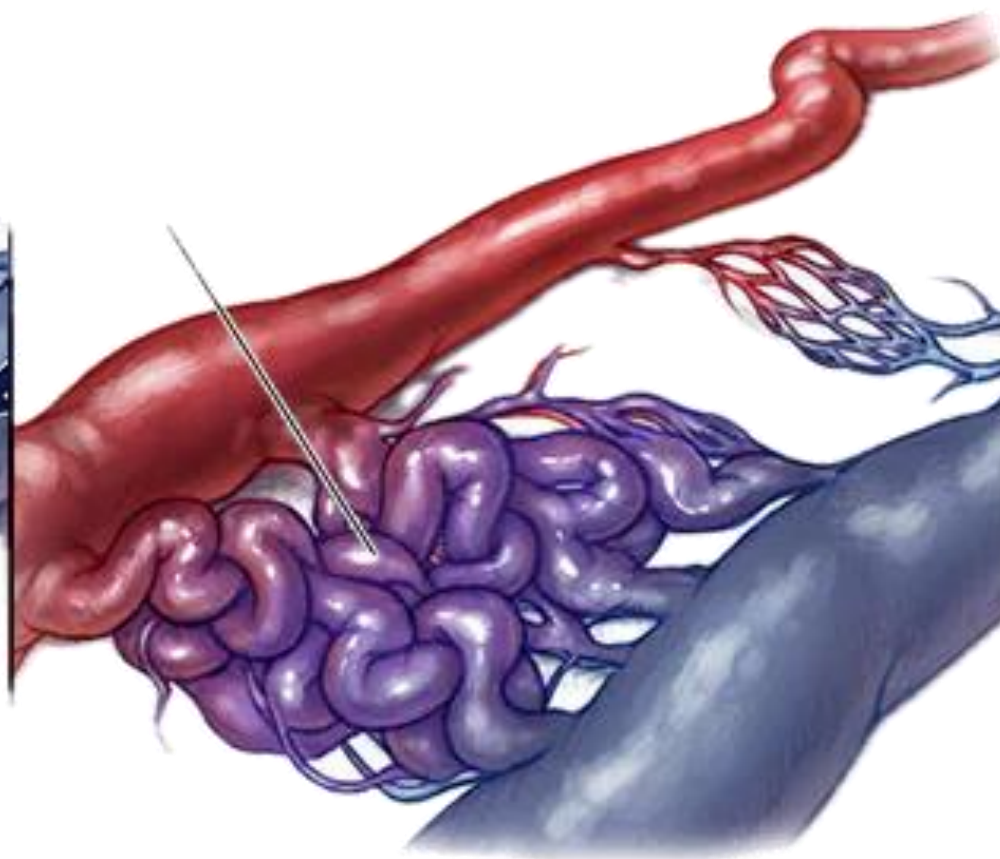
Toutefois, les **découvertes fortuites** sont de plus en plus fréquentes en raison de de l'élargissement des indications de l'imagerie non-invasive



# Malformation artério-veineuses



*Lit capillaire*



*Nidus*

## Malformation artério-veineuses

---

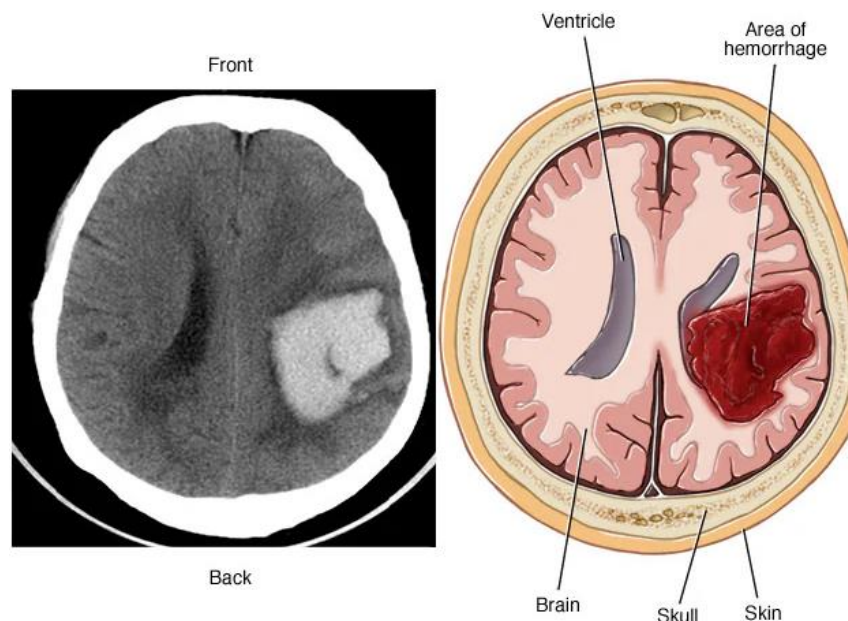
- **Prévalence** précise difficile à établir (rare et le + souvent asymptomatique)
- Environ 10 pour 100 000 habitants (0.01%)
- **Age moyen** au diagnostic : 30 - 40 ans

## Mode de révélation

**Environ 20% asymptomatiques au diagnostic**

**Sinon :**

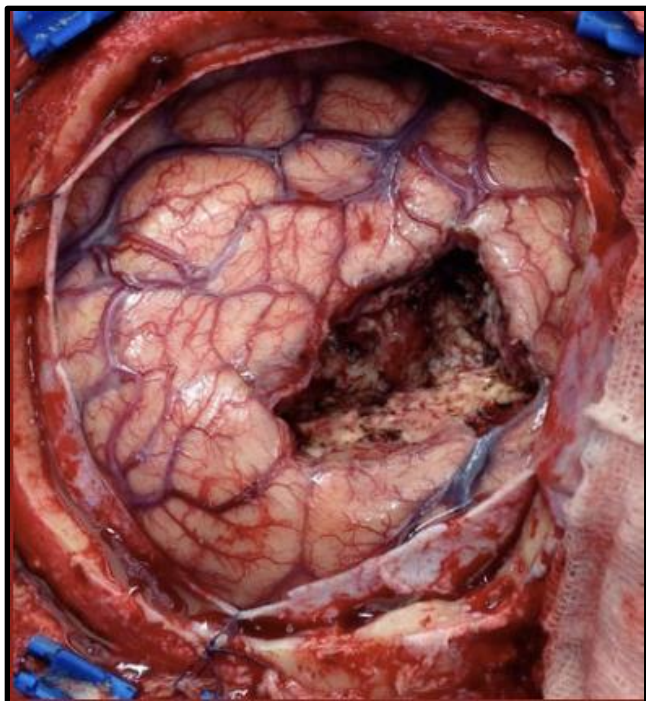
- Hémorragie intracrânienne (42%)
- Epilepsie (25%)
- Autres symptômes (6%)



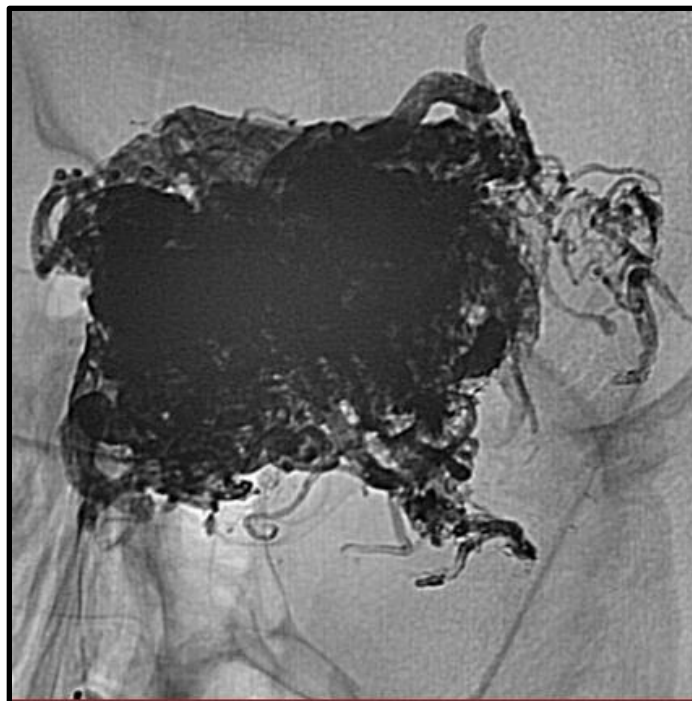


# Traitements des MAV

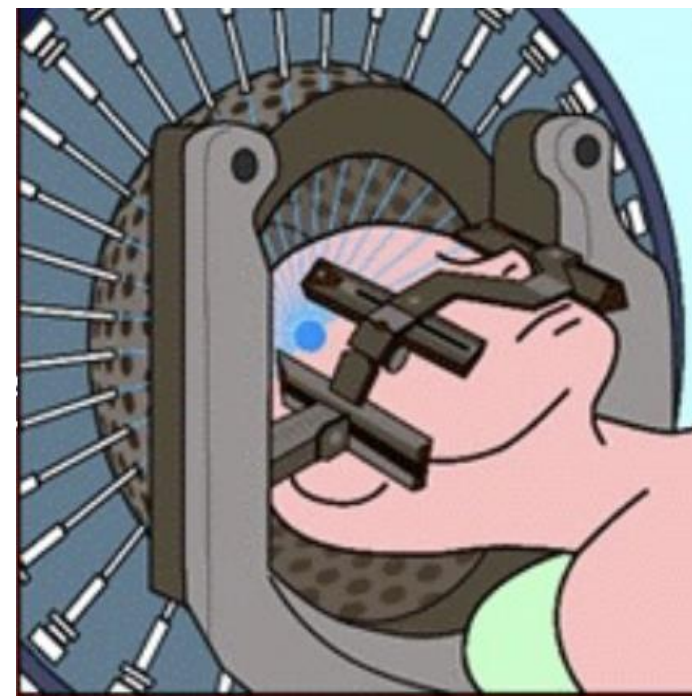
---



*Chirurgie*

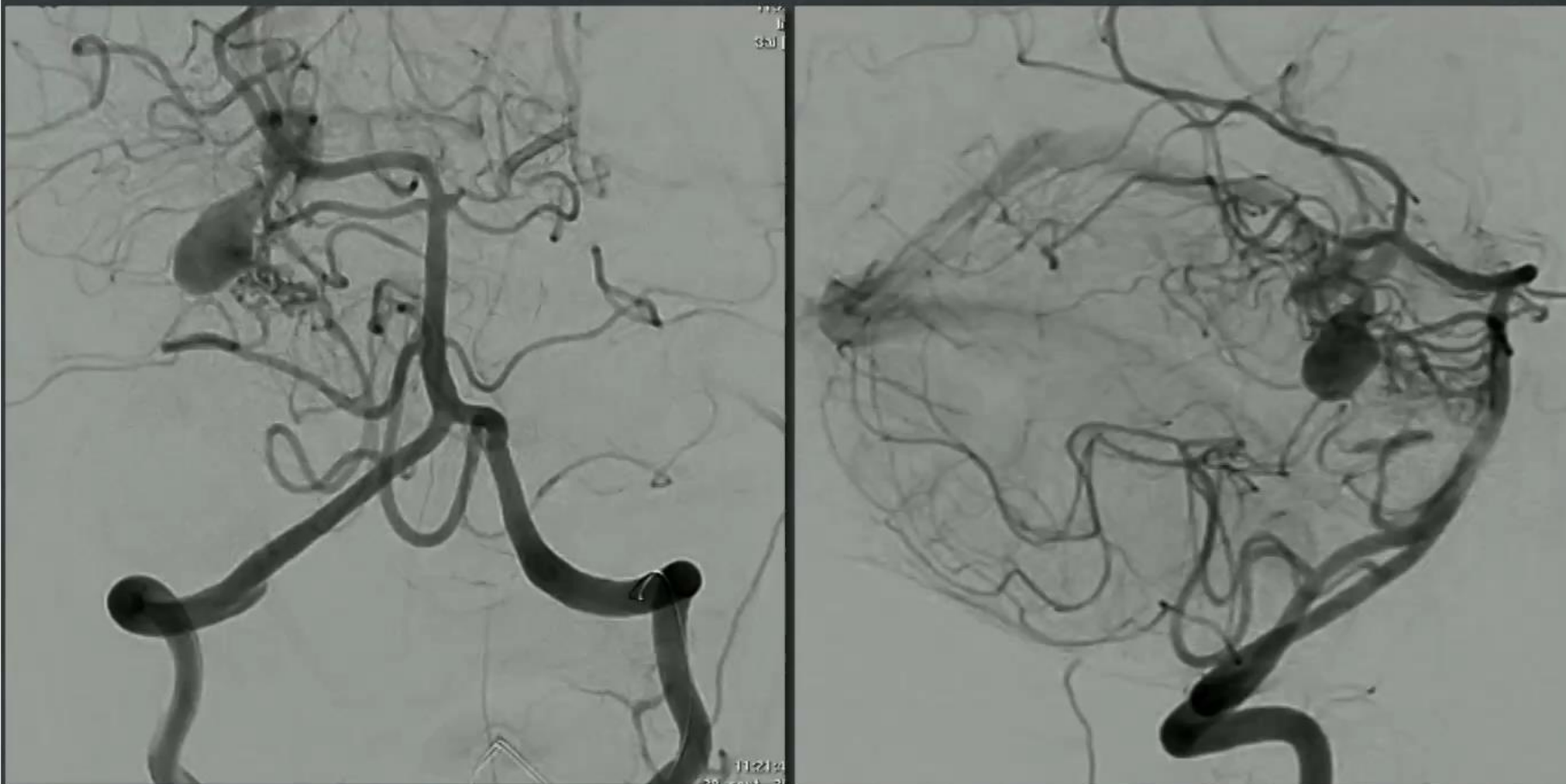


*Embolisation*

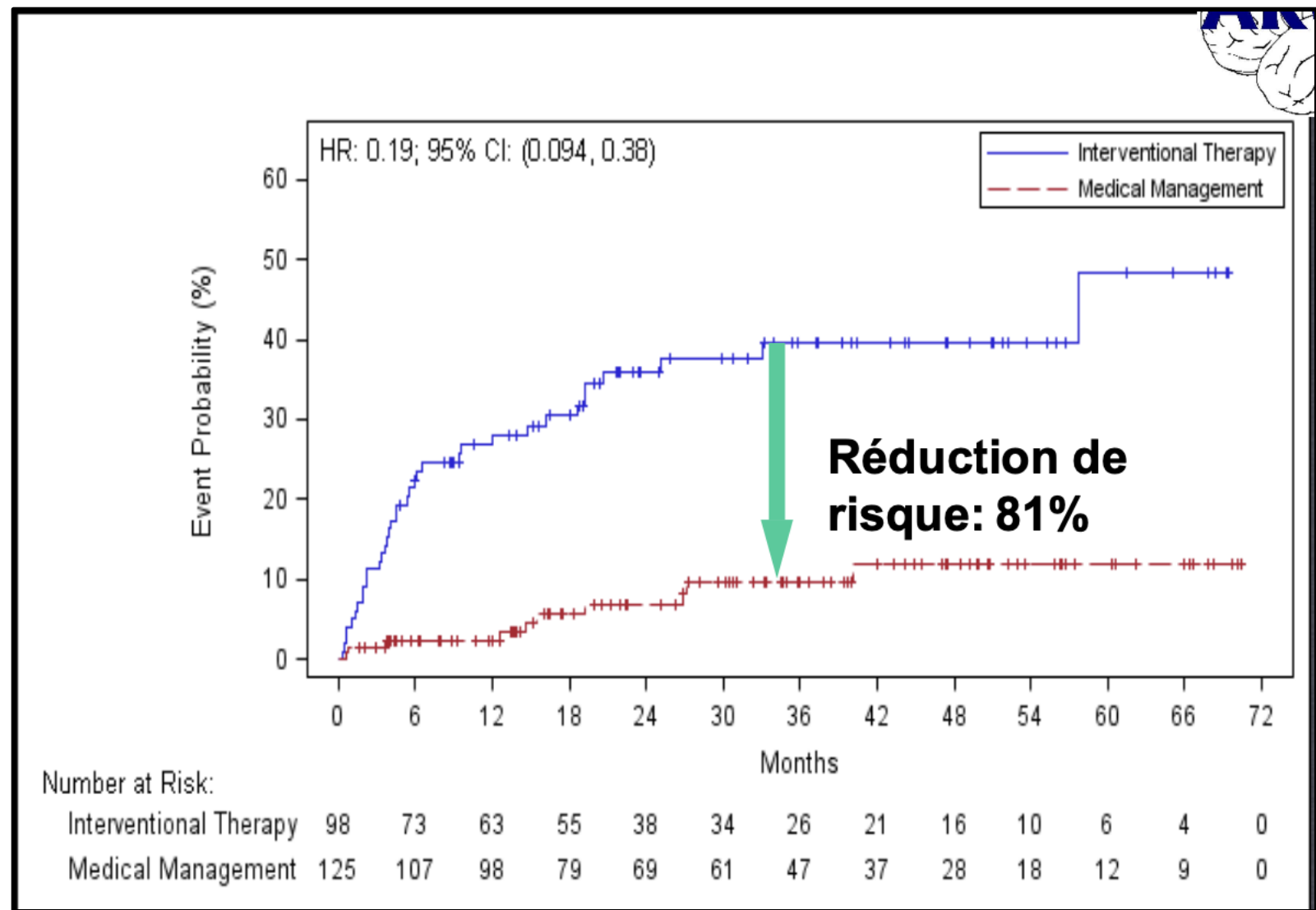
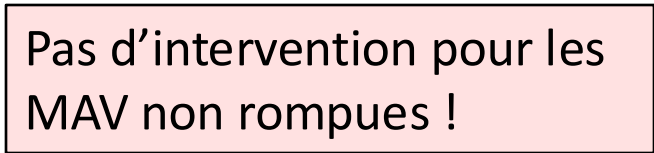


*Radiochirurgie*

## Initial angiogram







# MAV et sport

---



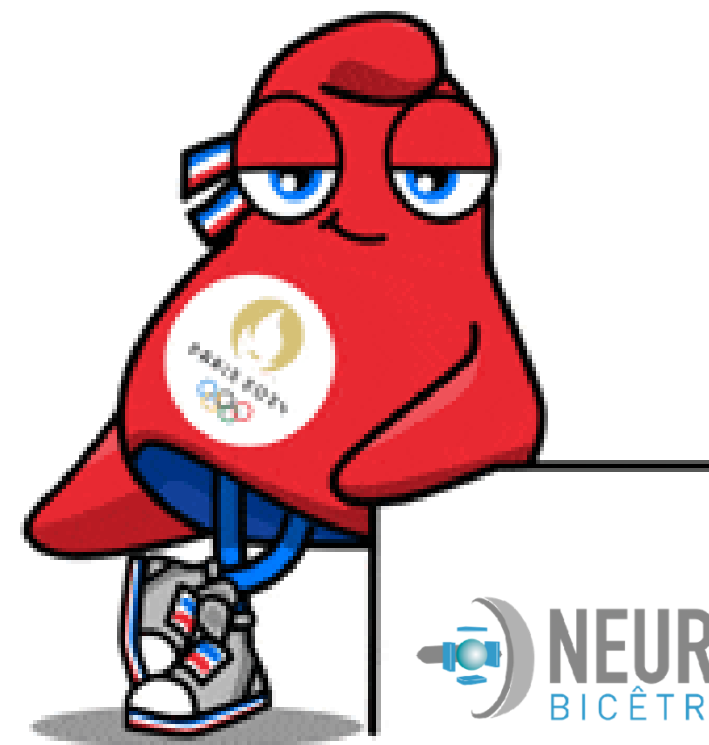
sport brain arteriovenous malformation

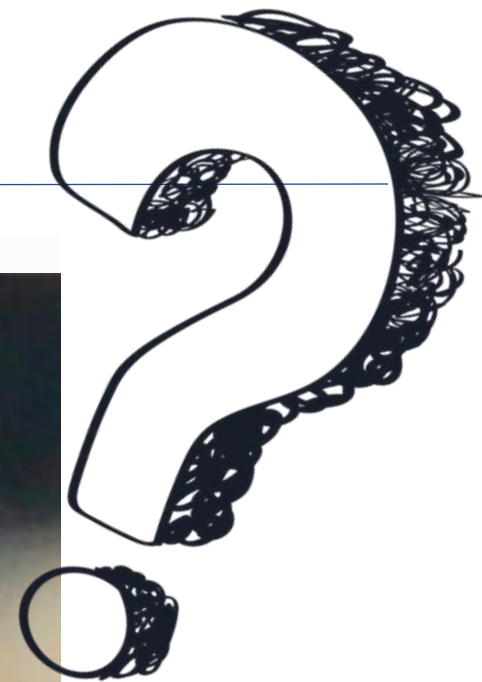


Search

[Advanced](#) [Create alert](#) [Create RSS](#)

[User Guide](#)





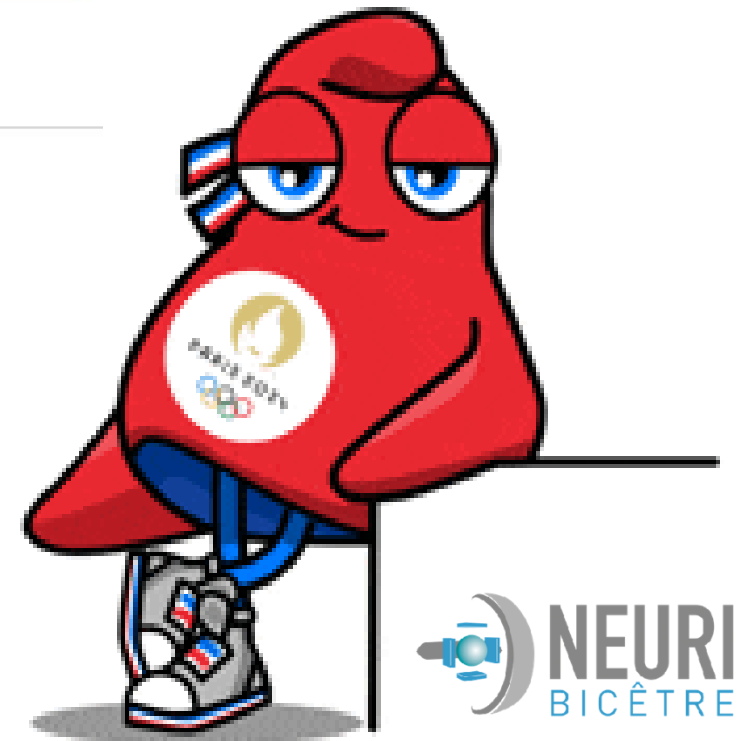


### What you can do in the meantime

Avoid any activity that may raise your blood pressure and put stress on a brain AVM, such as heavy lifting or straining. Also avoid taking any blood-thinning medicines, such as warfarin (Jantovin).

---

By Mayo Clinic Staff



# MAV et sport

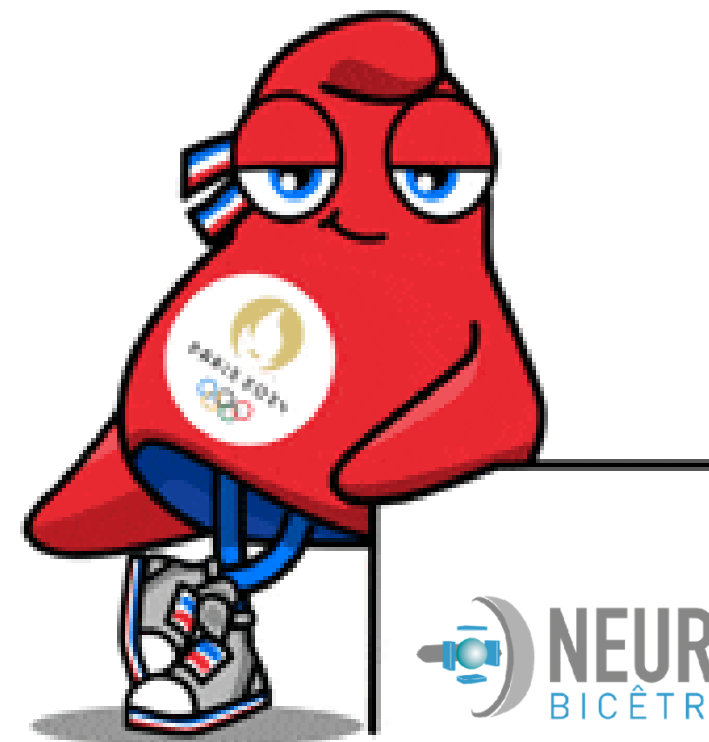
## Complex surgery gets college athlete back in play after rare brain condition threatens his life

December 5, 2017

Written By  
Heather Linder

### Topics

- Neurology >
- Patient Care >
- Video >
- Patient Story >
- Care >
- Surgery >



# MAV et sport



[Home](#) [New User Help](#) [General](#) [Crisis Help Line](#) [About/Contact](#) [Blog](#)

## Exercise/Running with a Brain AVM that has never bled

■ General ■ Blog



**Sandra\_S**

Mar 2014

Just looking for advice as to whether it is safe to take up running/exercise after a long time being a couch potatoe! I have a brain AVM of 4 x 4 which has never bled, but did suffer some seizures last year. I am 49 years old!

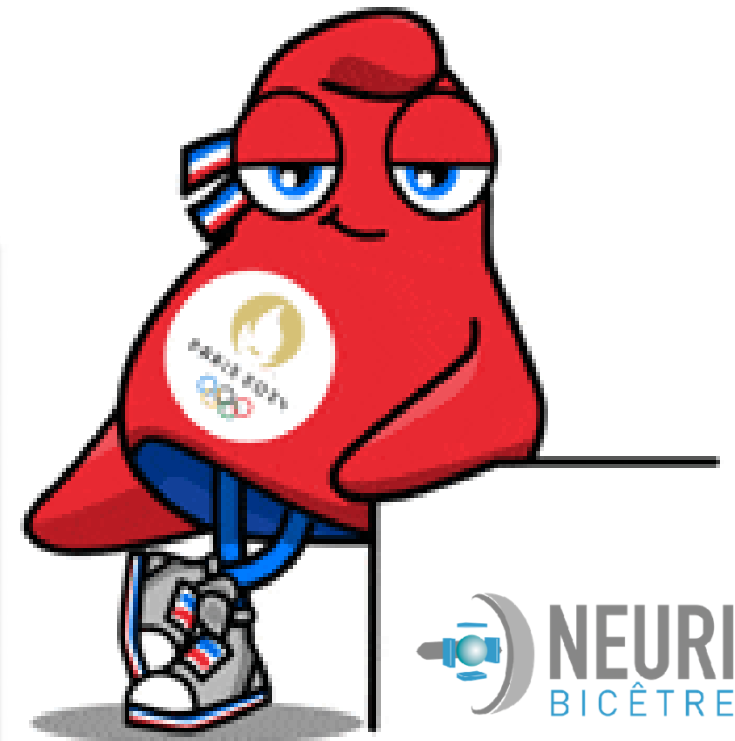
Sar



**Debbie\_mom**

Mar 2014

Hi Sandra, my son Stefan, also have a Brain AVM, un-operatable, un-treatable, he's 19 years old, 4cm in the left parietal side... He had to stop his cycling and so on, but we went to Prof. Le Fevreu (on the board for brain avm's) in Cape Town and he gave him the green light to exercise, but no heavy stuff, and exercises where you can bump your head or let your blood pressure rise. Most of the equipment in the gyms have monitors to monitor your heartbeats and blood pressure.... It's working for him, although he also still gets convulsions.... He was diagnosed in 2012 and had 2. Hope you will be up and on the exercise soon. Kind regards, Debbie



 **NEURI**  
BICÊTRE



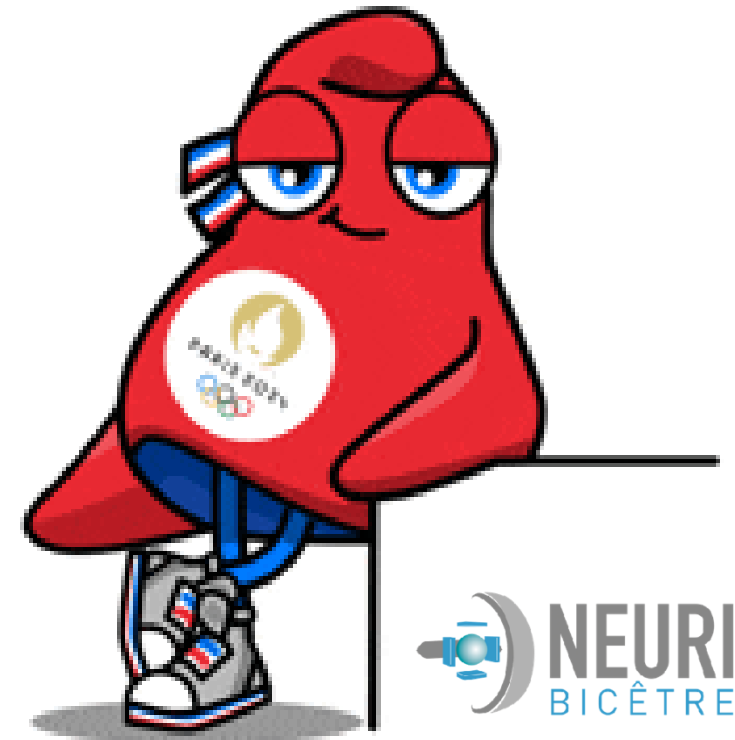
# MAV et sport



**Steve1** Facial Member

Mar 2014

My doctors only allow me to walk now, they tell me that is as good if not better than running although I ran my entire life and miss it. However, part of my problem is that in addition to the AVM (Face / Head) I am taking Coumadin due to a blood clotting condition so cannot afford to fall and hit my head. Unfortunately like many have commented when you exercise the blood pressure rises which is not good for the AVM plus, depending on the location of your AVM and what vessels it is networking or connected too, it good block off blood flow to certain areas. I know when I try to push myself too hard, to walk faster or increase the elevation (if I am on a treadmill) I become really unstable, start to have pain in my face and head, get shaky, and my balance/vertigo is shot. Finally, some of us have had embolizations with surgical glue (in my case it was Onxy) and I have been informed that if you have had glue inserted into vessels like I've had that you cannot exert pressure, so I have been told no weight lifting or any exercise that would cause me to bear down hard or grimace. That is kind of scary advice when you think about it as, like someone mentioned, you do those things when you cough, sneeze, etc. Anyway, as you advisor suggests I would recommend walking and they have some cool things you can use now to enhance a wlaiking workout like walking poles, hand weights, etc.



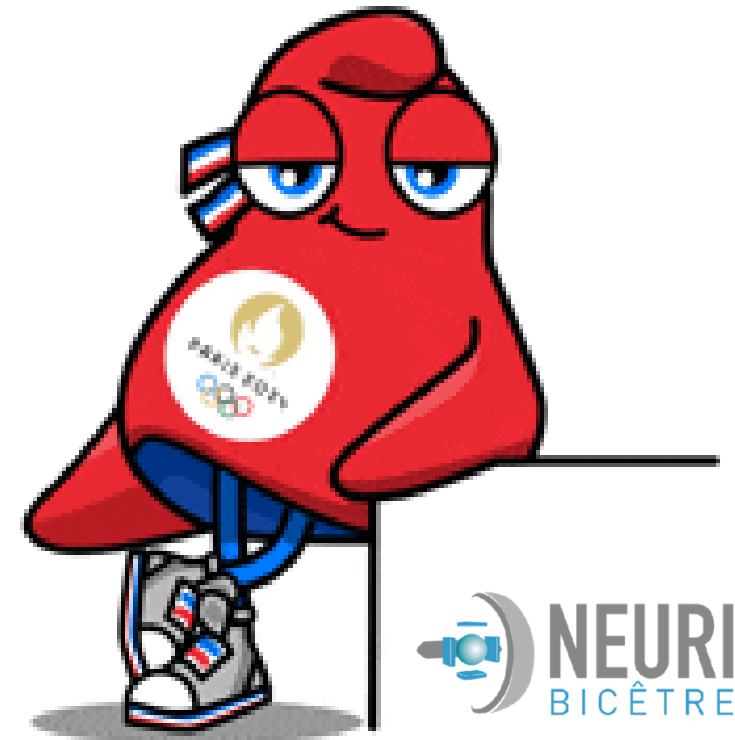
# MAV et sport



Kristy\_H

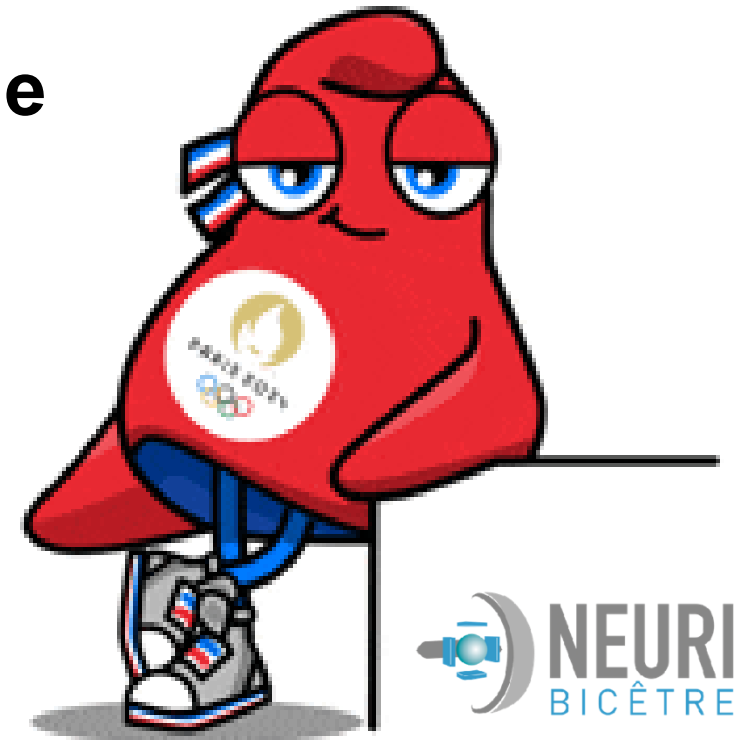
Mar 2014

My AVM bled during a martial arts class where we were very active -- I was 15 yrs-old at the time. I had another bleed while vigourously roller skating -- I was 17 yrs-old at the time, I am currently 47 yrs-old and had a bleed 2 yrs ago. My neurologist ordered an angiogram which showed 2 new avm's, one of which was treatable with embolization and I've been fine since then;however, though I walk daily I have not resumed strenuous exercise. As stated by many of the members here, I suggest talking to your neurologist/surgeon before starting an exercise regime.



- **Manque « evidence »** pour guider nos patients
- Mais **événements** rapportés **rare** ++++
- Activité sportive probablement >>> **bénéfique**  
=> endurance (HTA...), autre?

=> Réponse personnalisée







*Guidelines Committee*

L'HOSPICE, DE  
BICÈTRE.

Merci

!

✉ [Jildaz.caroff@aphp.fr](mailto:Jildaz.caroff@aphp.fr)

