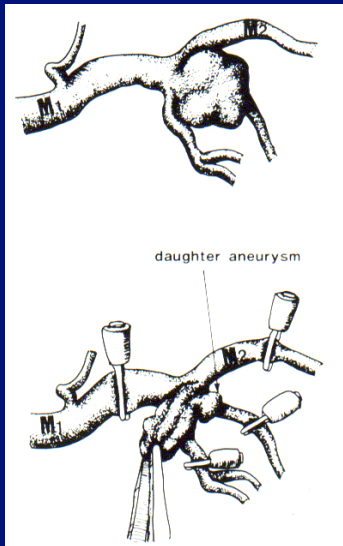


# *The 8th Annual International Neurosurgery Conference 26-31 December 2012*



## **Temporary Clipping in Aneurysm Surgery When it's indicated**



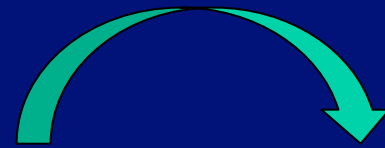
**Prof. Dr. Leónidas M. Quintana M.D.**  
**Chief of Neurosurgery Service – Van Buren Hospital**  
**Cathedra of Neurosurgery**  
**Valparaíso University School of Medicine, Chile**



# **TEMPORARY CLIPPING UNDER BRAIN PROTECTION FOR :**



1. - TO AVOID ( AND TO TREAT ) PREMATURE RUPTURE
2. -"REMODELATION " OF THE NECK AND DOME
3. - DECREASE TENSION INSIDE DOME AND NECK
4. -FRAGILE NECK - TO AVOID RUPTURE
5. -TO AVOID CLIP SLIDING
6. -TO AVOID STENOSIS OF MAIN ARTERY
7. -FACILITATE NEIGHBOURING VISUALIZATION
8. - BIG OR GIANT ANEURYSMS



# CEREBRAL PROTECTION

## VALPARAÍSO COCKTAIL

**PROPOFOL**      10 mg/Kg./hr.

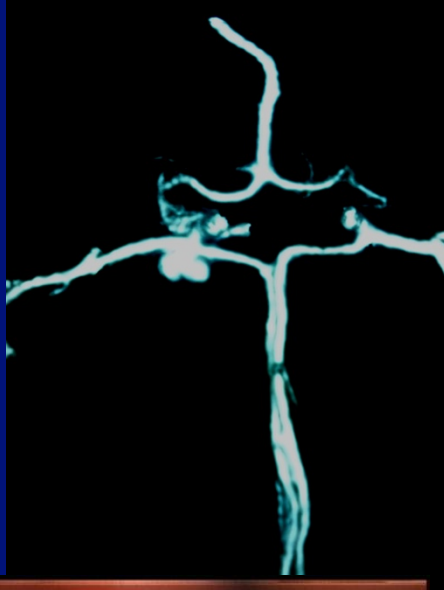
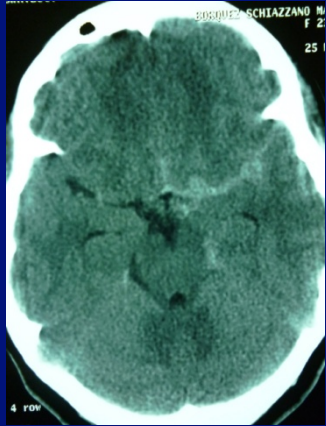
**↓ METABOLIC  
NEEDS**

**MANITOL**      1gr/Kg/doses e/ 100 min

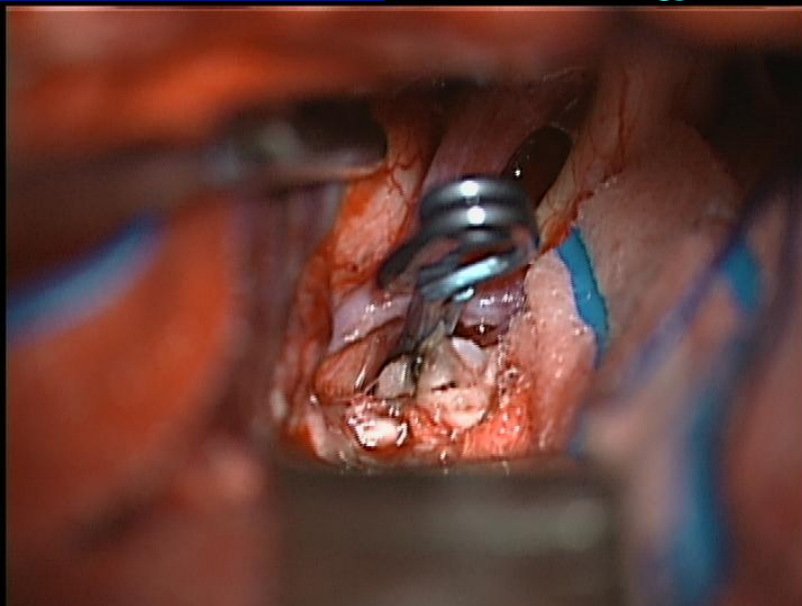
**↑ COLLATERAL  
CBF**

**NIMODIPINE**   2 mg/ hr. continous I.V.

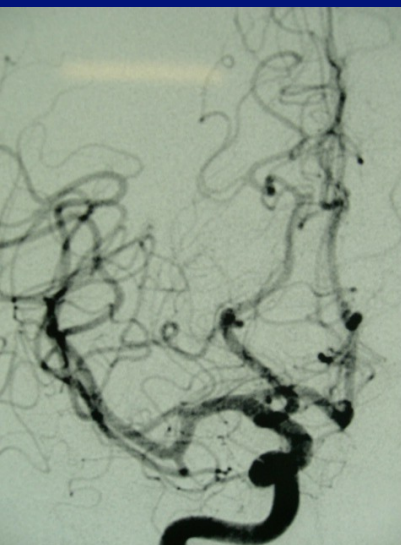
# 1- TO AVOID ( AND TREAT ) PREMATURE RUPTURE



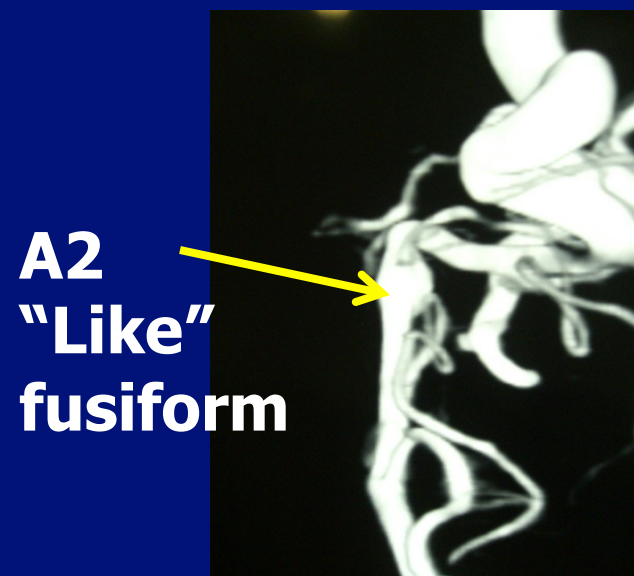
**IC ARTERY  
BIFURCATION  
( BILOBED- WIDE  
NECK) ANEURYSM**



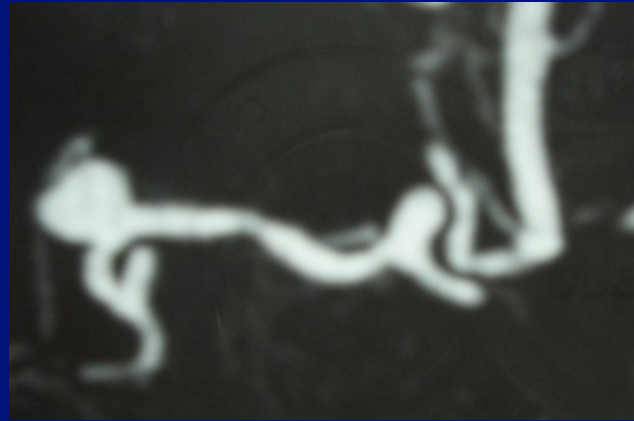
## 2-"REMODELATION" OF NECK AND DOME



**An right A1-A2 Big  
Thrombectomy  
Remodeling artery and  
neck with microcoagulation  
and fenestrated clips**

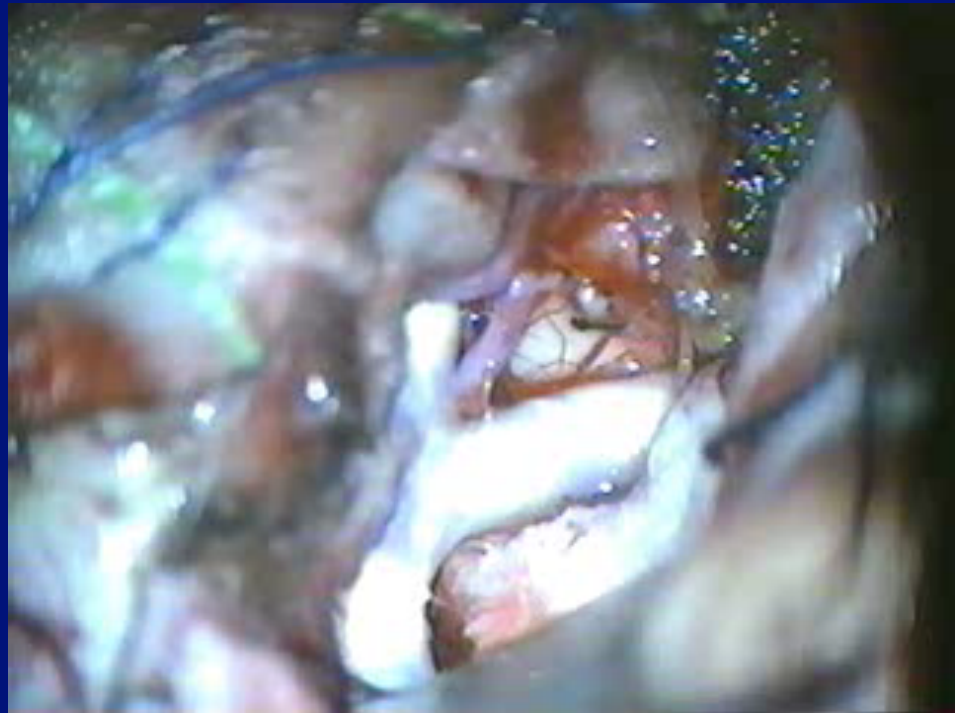


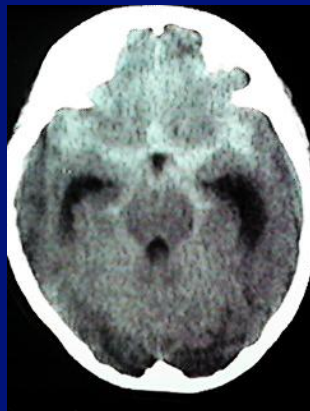
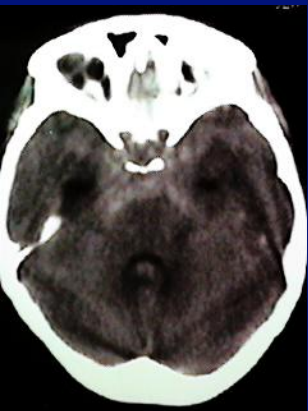
# 3-To decrease tension inside the dome and neck



## **BIG ANEURYSM MIDDLE CEREBRAL ARTERY**

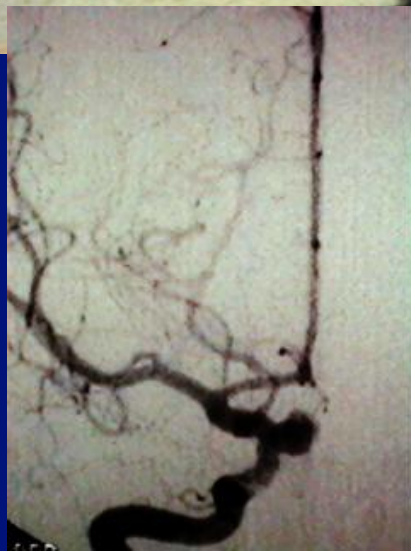
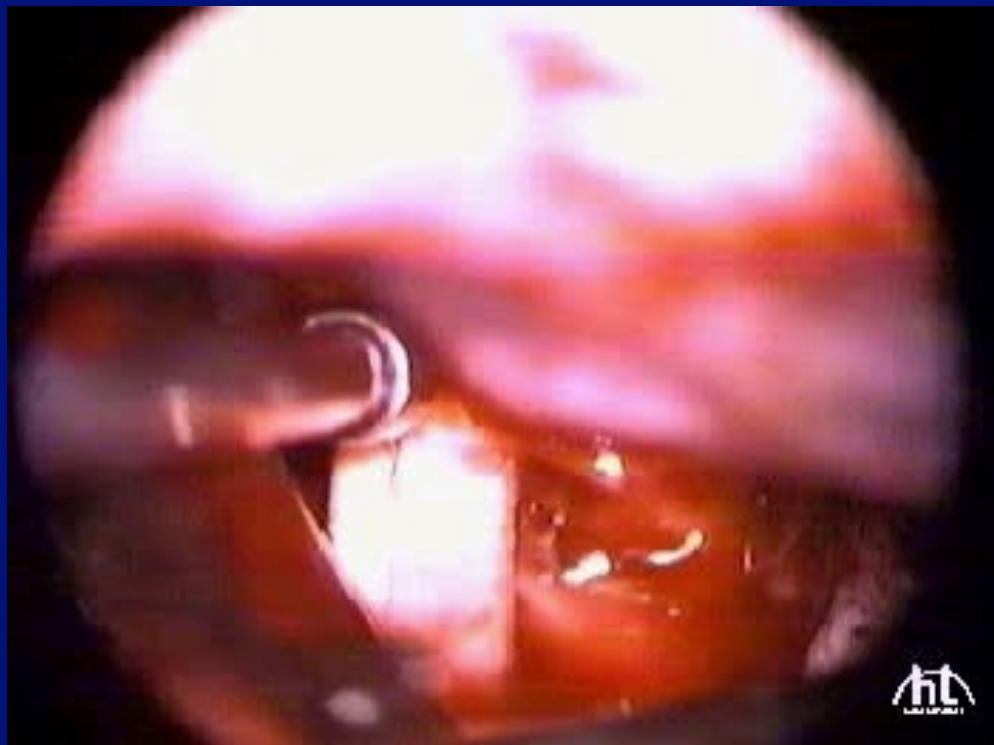
**Wide aneurysm neck;  
Temporary clipping  
Neck walls become relaxed  
Using the same clip, now  
the clip is applied smoothly**



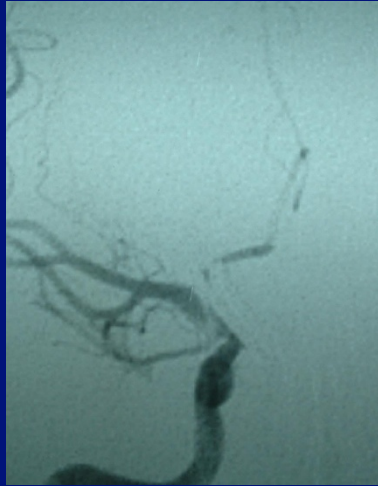
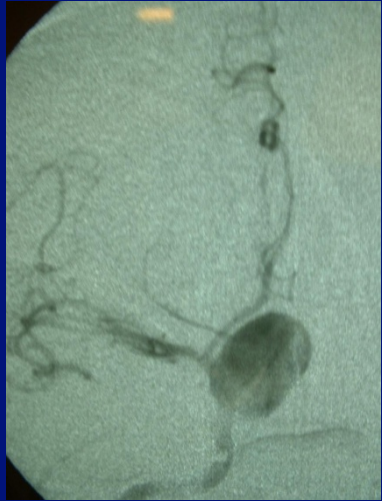


**4-TO AVOID CLIP SLIDING**

**CAROTID -OPHTHALMIC  
ANEURYSM**



# 5-TO AVOID STENOSIS OF THE MAIN ARTERY



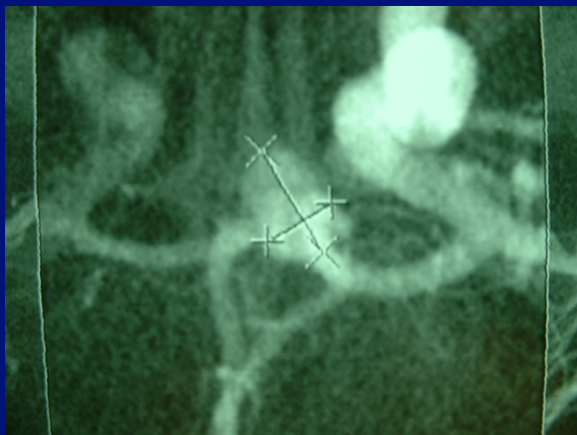
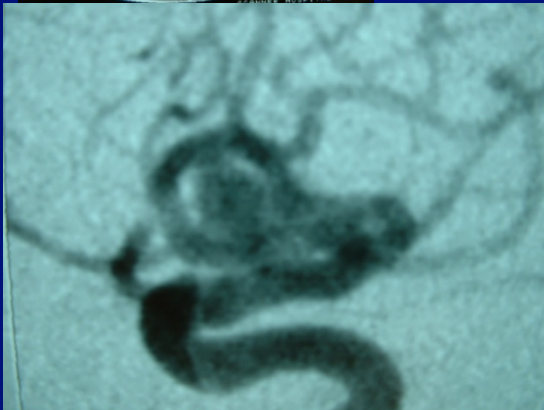
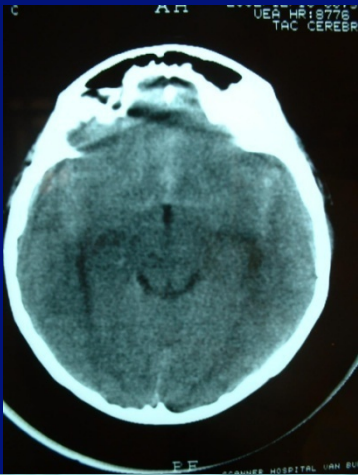
## PARACLINOIDAL GIANT CEREBRAL ANEURYSM





# 6-TO FACILITATE NEIGHBOURING VISUALIZATION

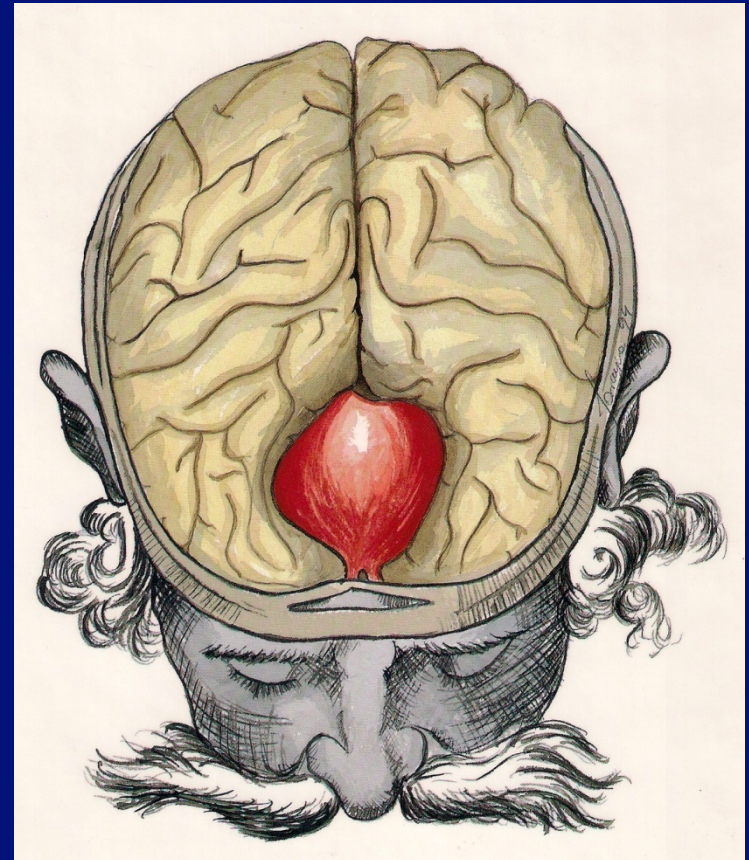
**A Com Aneurysm**  
**Anterior direction- Big**



# CEREBRAL PROTECTION DURING TEMPORARY CLIPPING IN SURGERY OF GIANT ANEURYSMS

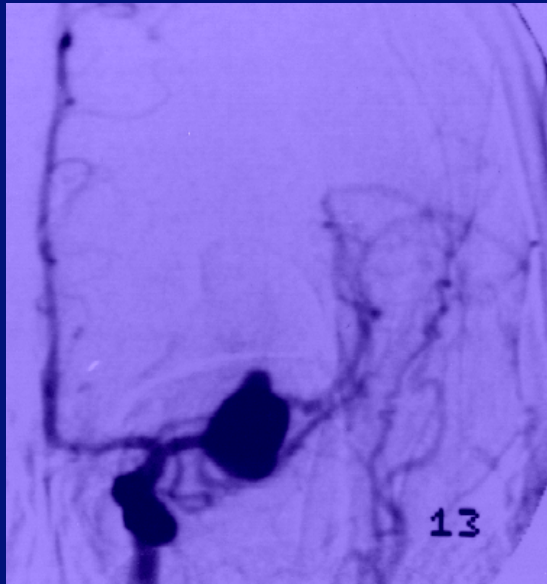
## ADVANTAGES

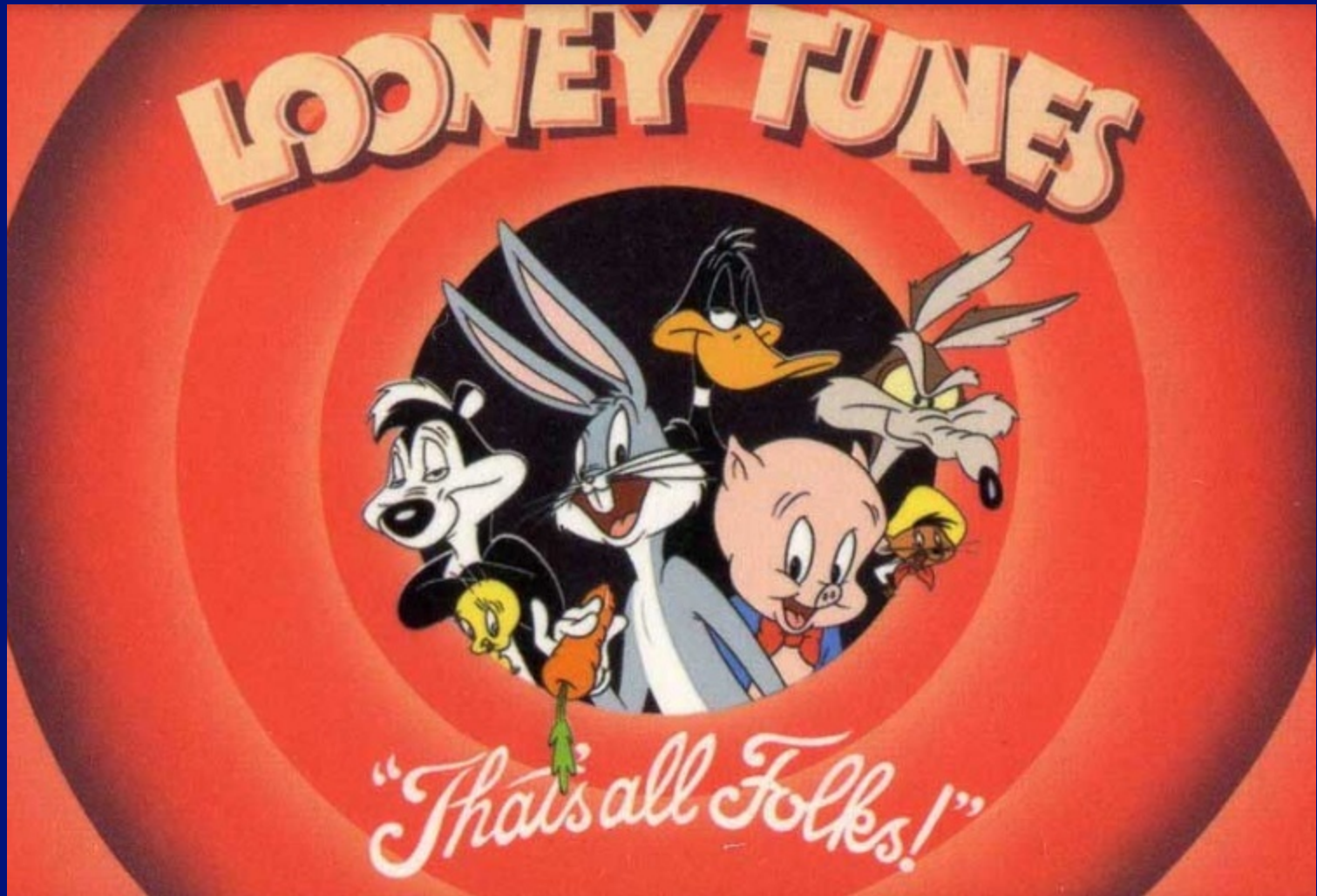
- DECREASE TENSION INSIDE WALLS OF DOME
- AVOID PREMATURE RUPTURE
- TO OPEN THE DOME AND TAKE OFF FIBRIN CLOTS
- FACILITATE DISECTION OF EFFERENT ARTERIES AND OTHER STRUCTURES
- TO IMPROVE VISUALIZATION
- TO TREAT A WIDE NECK



# 7-BIG OR GIANT ANEURYSMS

**BIFURCATION MCA ANEURYSM – BIG, WITH THICK WALLS AND TENSE NECK**





***THANK YOU VERY MUCH !!!***

Prof. Dr. Leónidas M. Quintana M.D.  
Chief of Neurosurgery Service – Van Buren Hospital  
Catheda of Neurosurgery  
Valparaíso University School of Medicine, Chile