

VIII SISAV International Congress

Vascular anomalies:
update on diagnostic
and therapeutic approach

Roma

9-11 Settembre 2021

Auditorium Valerio Nobili

Ospedale Pediatrico Bambino Gesù

(Sede di S. Paolo)

Viale Ferdinando Baldelli, 38



Anomalie vascolari cranio-facciali con interessamento della circolazione arteriosa orbitaria: ruolo del trattamento endovascolare

Guglielmo Paolantonio



Firenze

VII
Congresso
Nazionale

Innovazione e perfezionamento
nelle anomalie vascolari

SISAV 2019

VENERDÌ 25 OTTOBRE 2019

9.00-9.50

Sessione 5

Focus sulla regione orbitaria

Moderatori: Flavio Facchini, Carlo Gandolfo

9.00-9.10

Malformazioni venose

Francesco Pasetti

9.10-9.20

La regione orbito-palpebrale

Mario Zama

9.20-9.30

Anomalie vascolari dell'orbita

Elisa Negri

9.30-9.40

Emangiomi infantili e diagnosi differenziali

Claudia Carnevale, Guglielmo Paolantonio

9.40-9.50

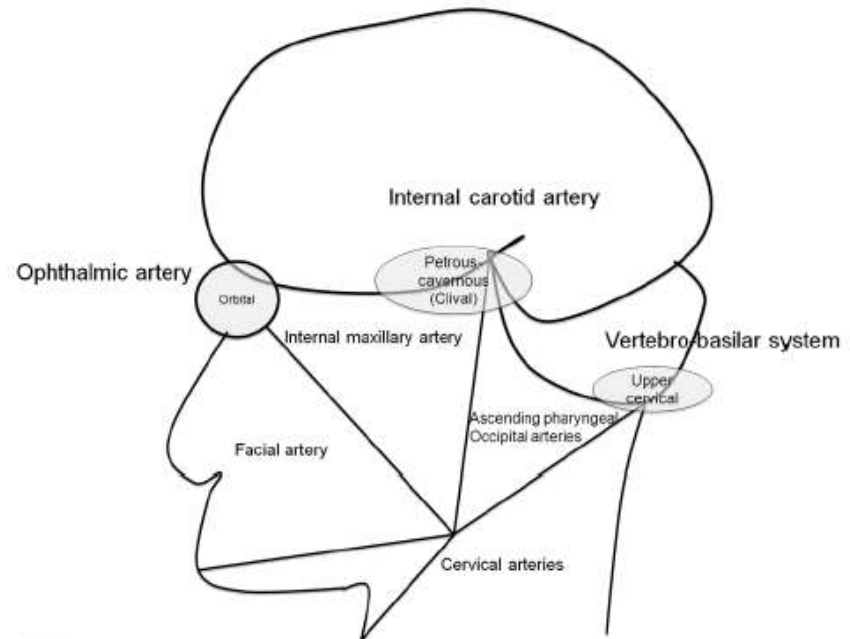
Discussione

Barbara Zamma Gallarati, Carlo Gandolfo, Iria Neri, Flavio Facchini

P. Lasjaunias · A. Berenstein

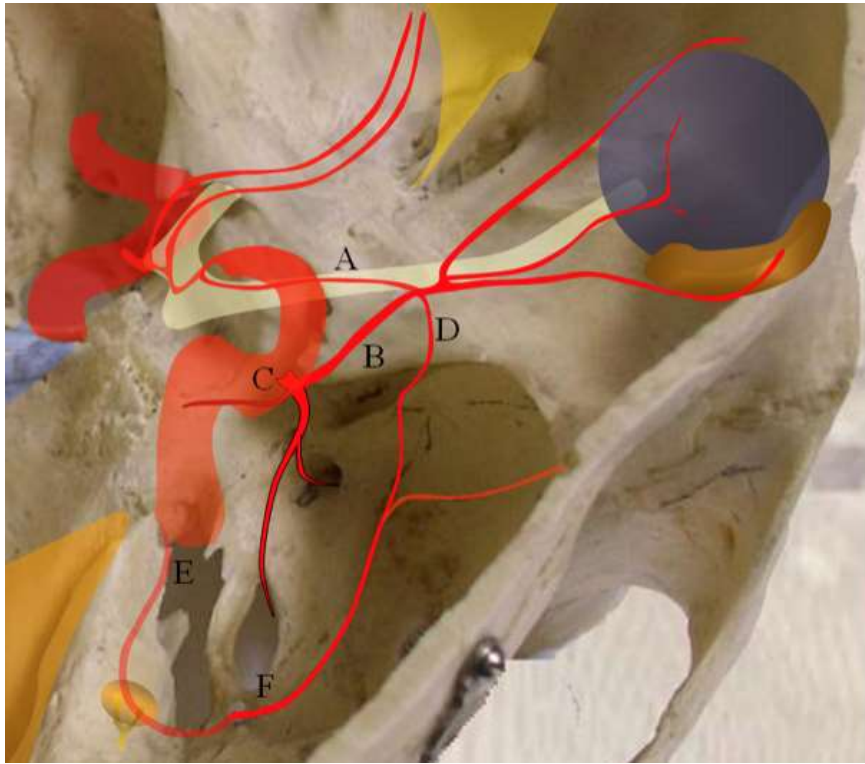
Surgical Neuro- angiography

1 Functional Anatomy of
Craniofacial Arteries

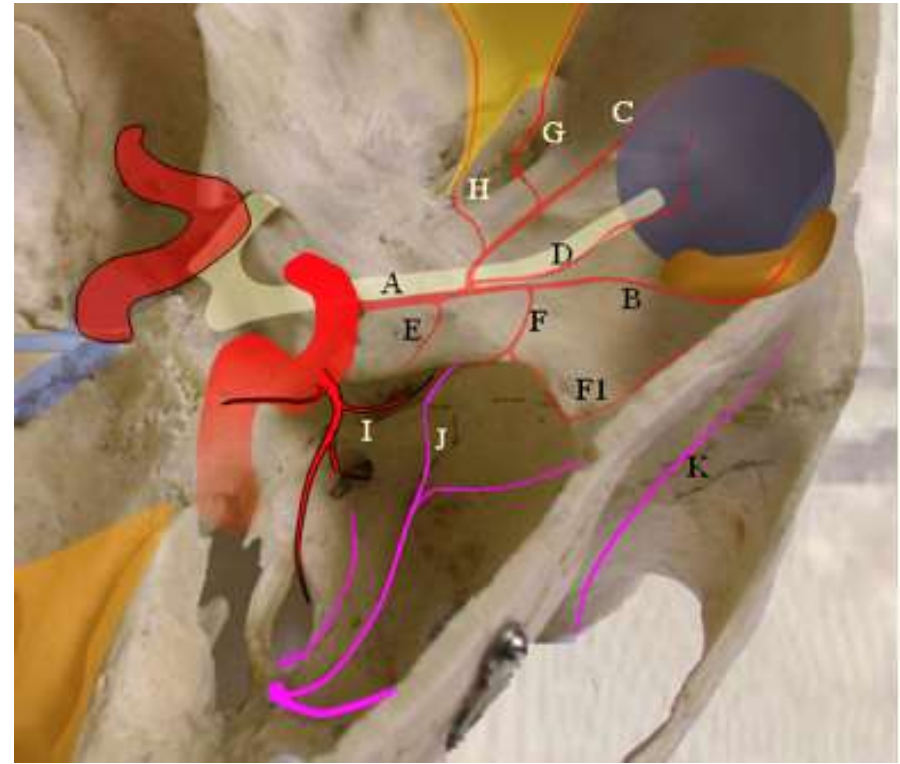


Geibprasert S_AJNR 2009; 30 (8):1459-68

early embryonic ophthalmic artery



definitive ophthalmic artery



A (ventral ophthalmic artery)

B (dorsal ophthalmic artery)

E (stapedial artery) - forerunner of **MMA** (J) → F – recurrent meningeal/meningo-ophthalmic artery

Congdon ED. *Transformation of the aortic-arch system during the development of the human embryo*. Contrib Embryol 1922; 14:47–110

Padget D. *The development of the cranial arteries in the human embryo*. Contrib Embryol 1948; 32:207–262

Lasjaunias P, Berenstein A, Ter Brugge KJ. *Clinical vascular anatomy and variations*. Berlin, Germany: Springer 2001:414-424

Silbergleit R. *AJNR*, 21:572–577, March 2000

Neuroangio.org

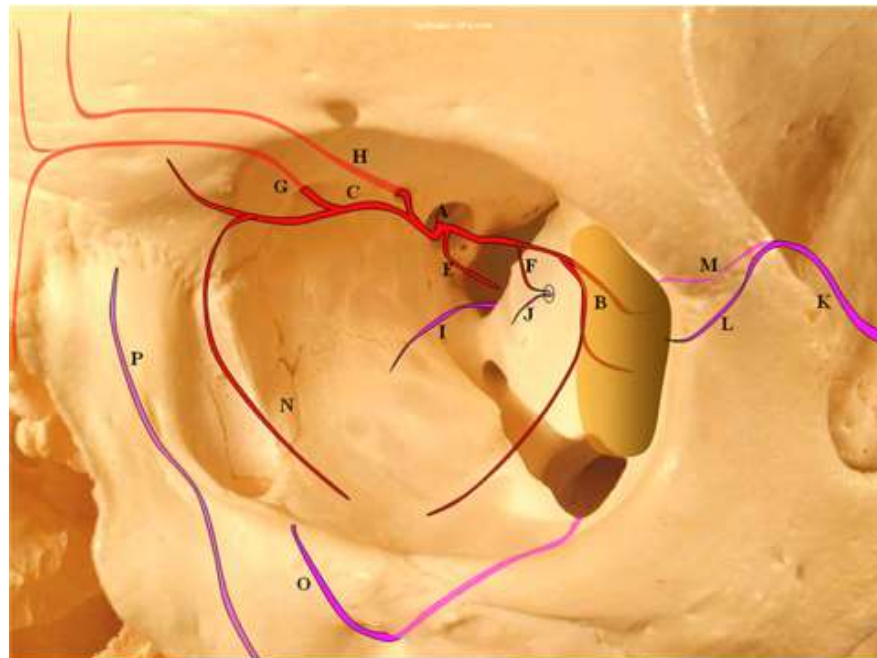
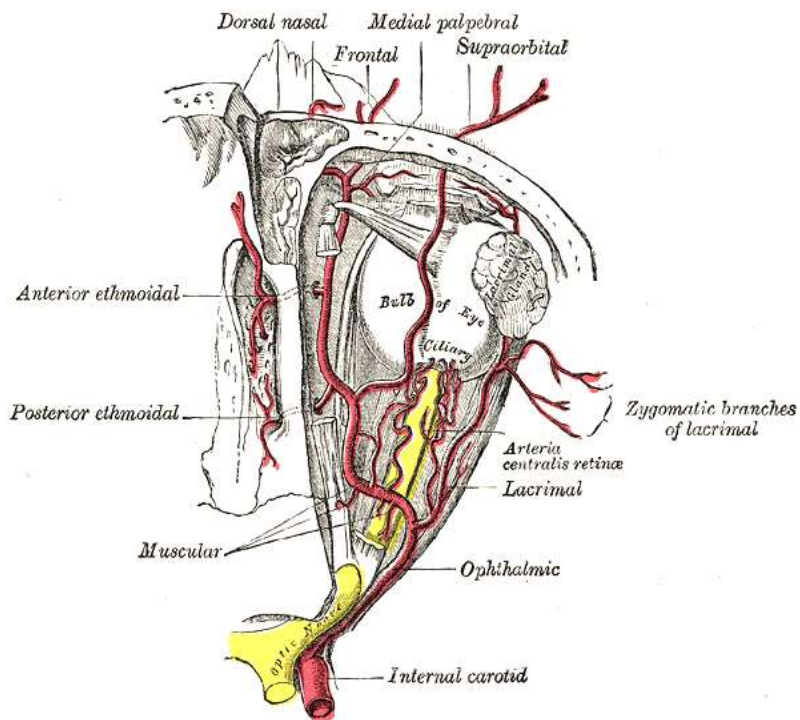
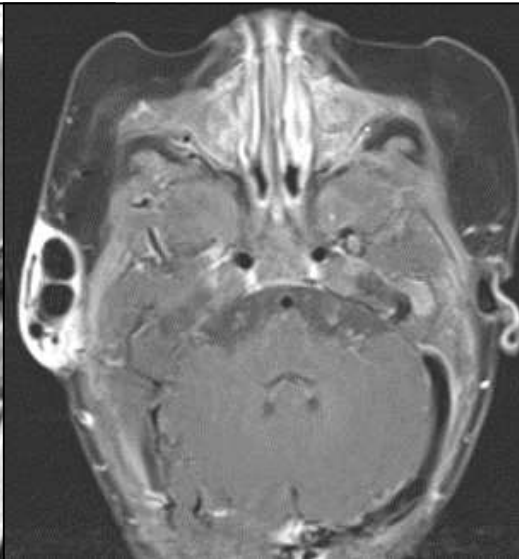
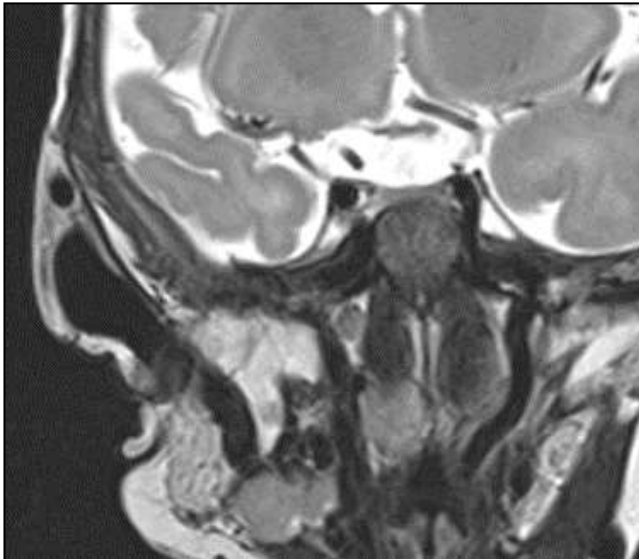
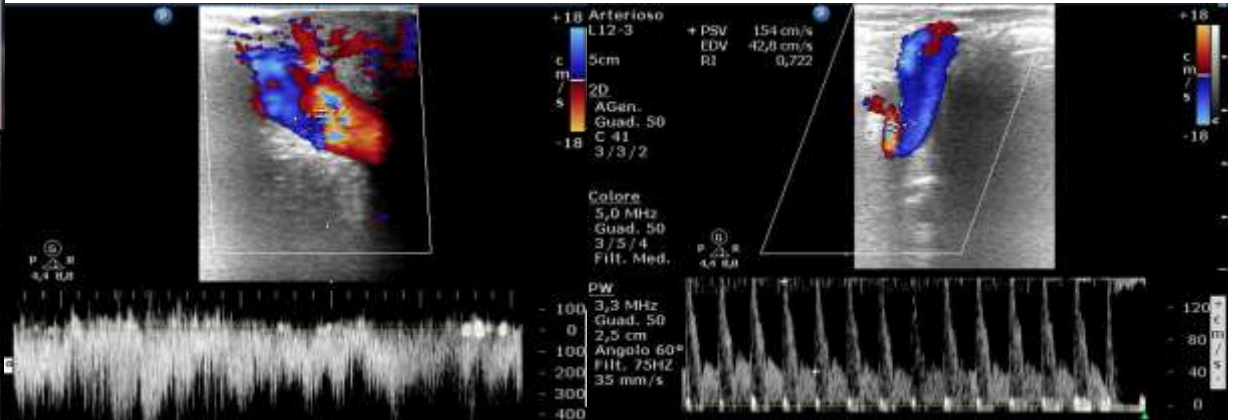
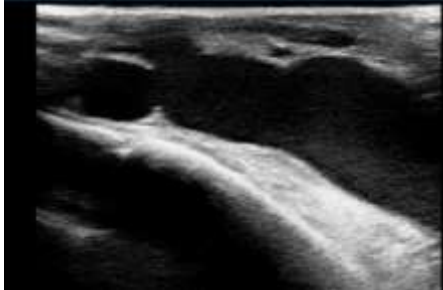
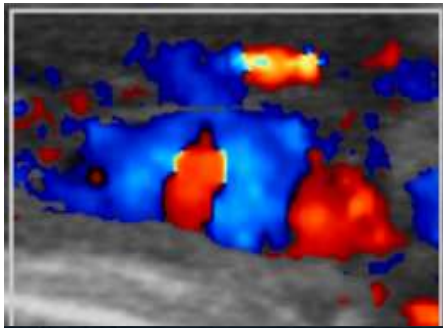


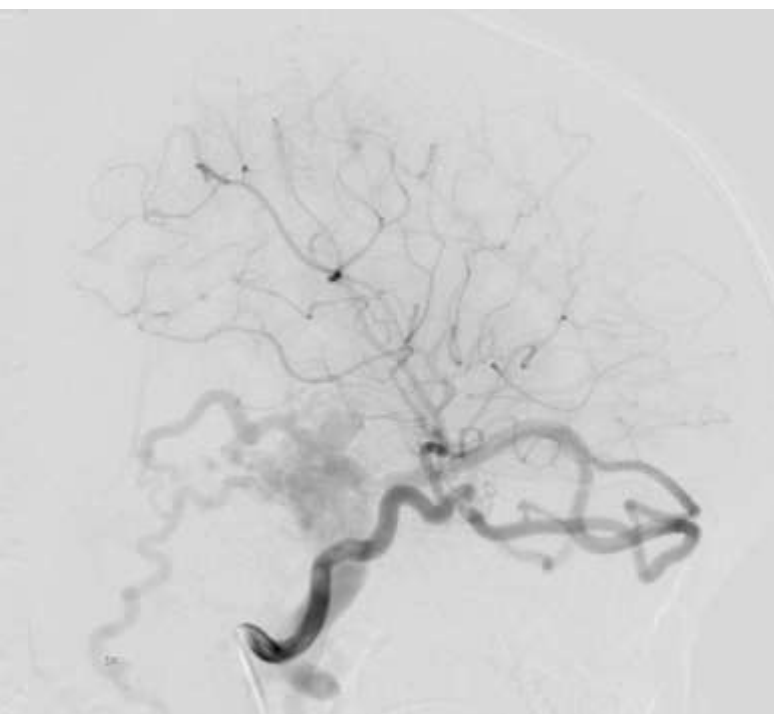
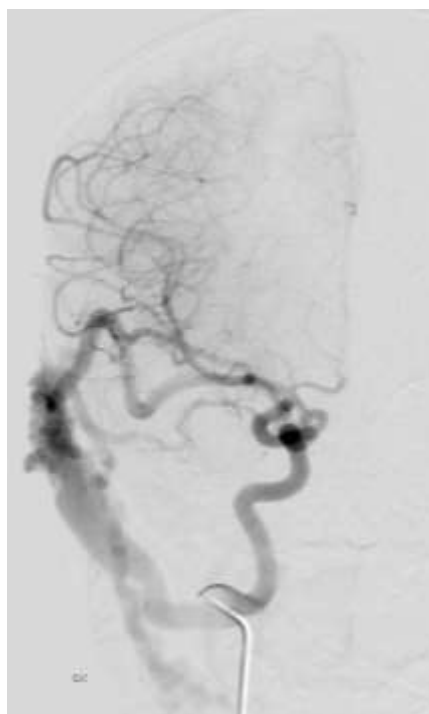
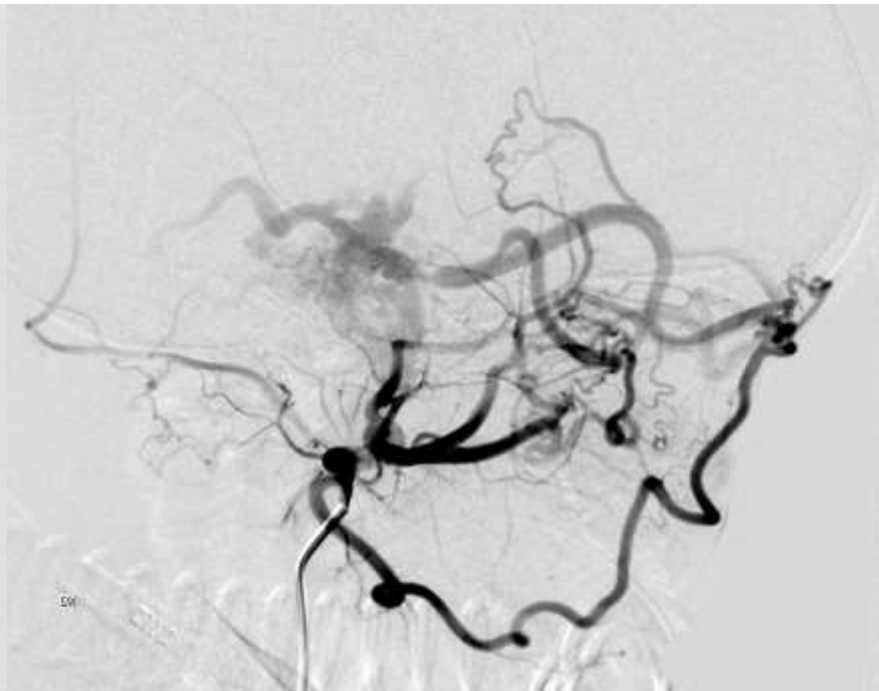
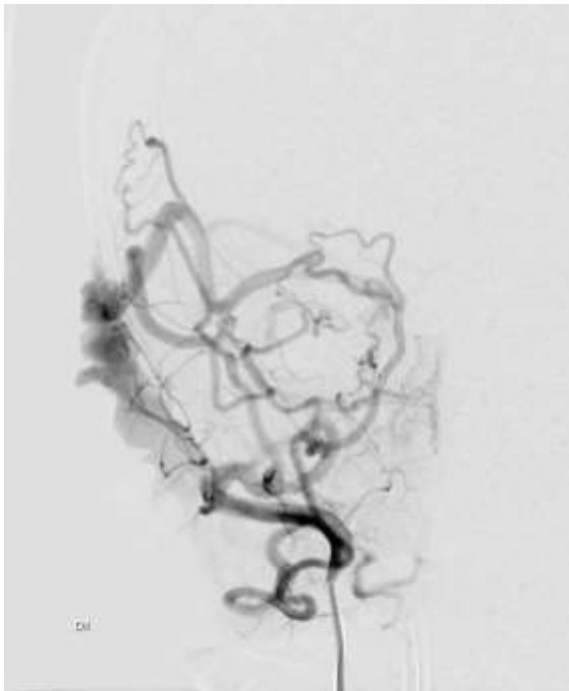
Table 2: Summary of the branches of the ophthalmic artery and their anastomoses to the ECA

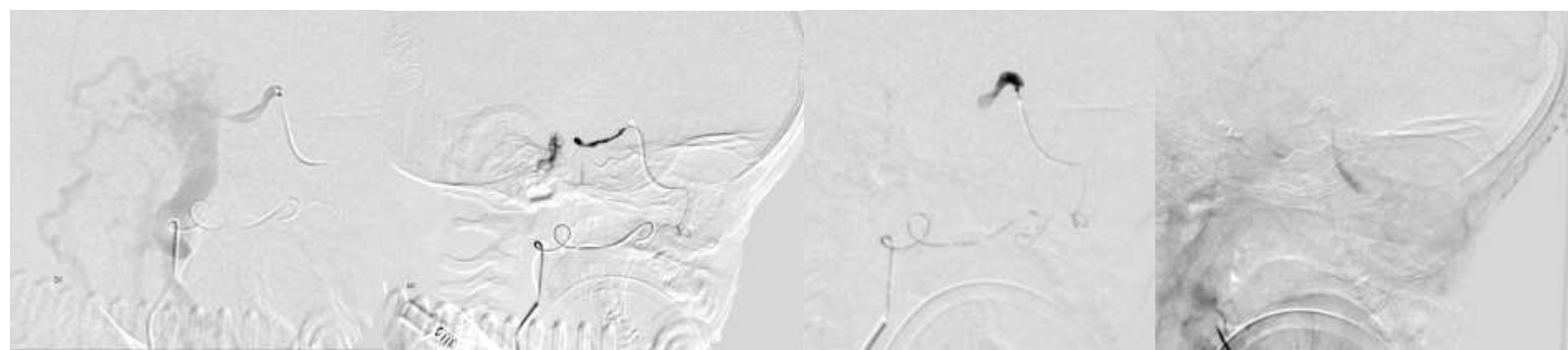
Ophthalmic Artery Branch	Origin of the Ophthalmic Branch	ECA Branch
Proximal lacrimal artery (main branch)	Second portion of OA	MMA (through superior orbital fissure)
Distal lacrimal artery (inferior branch)	Second portion of OA	Anterior deep temporal artery and infraorbital artery (IMA)
Anterior ethmoidal arteries	Third portion of OA	Septal arteries: sphenopalatine artery (IMA), MMA
Posterior ethmoidal arteries	Second or third portion of OA	Sphenopalatine artery, greater palatine artery (IMA), MMA
Supraorbital artery	Third portion of OA	STA
Dorsal nasal artery	Terminal branch of OA	Angular termination of FA, infraorbital artery

Lasjaunias P, Berenstein A, Ter Brugge KJ_Clinical vascular anatomy and variations. Berlin, Germany: Springer 2001:414-424
 Silbergleit R_AJNR 21:572-577, March 2000
 Geibprasert S_AJNR 2009; 30 (8):1459-68
 Neuroangio.org

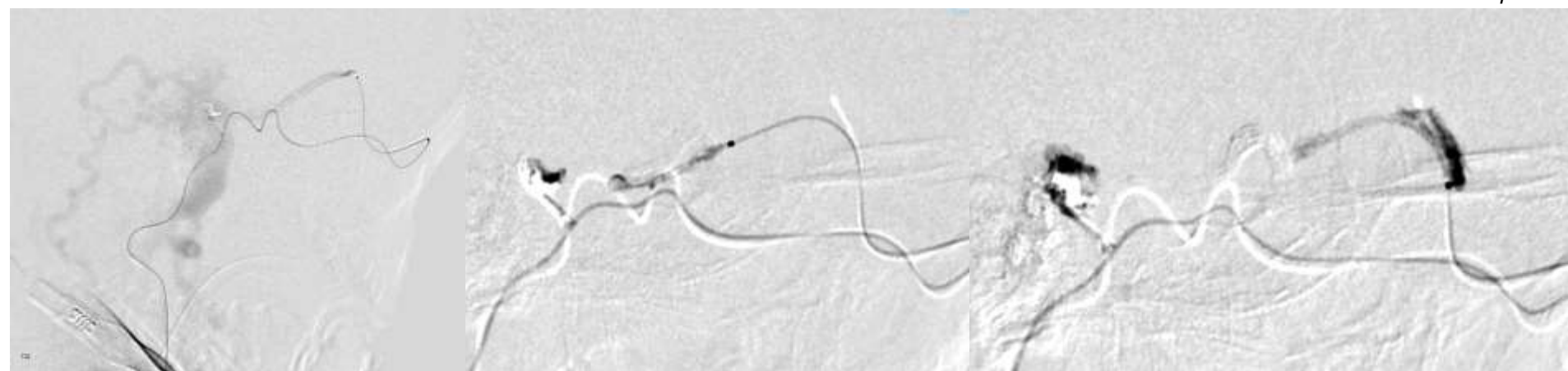
♀, 15 mesi, PICH



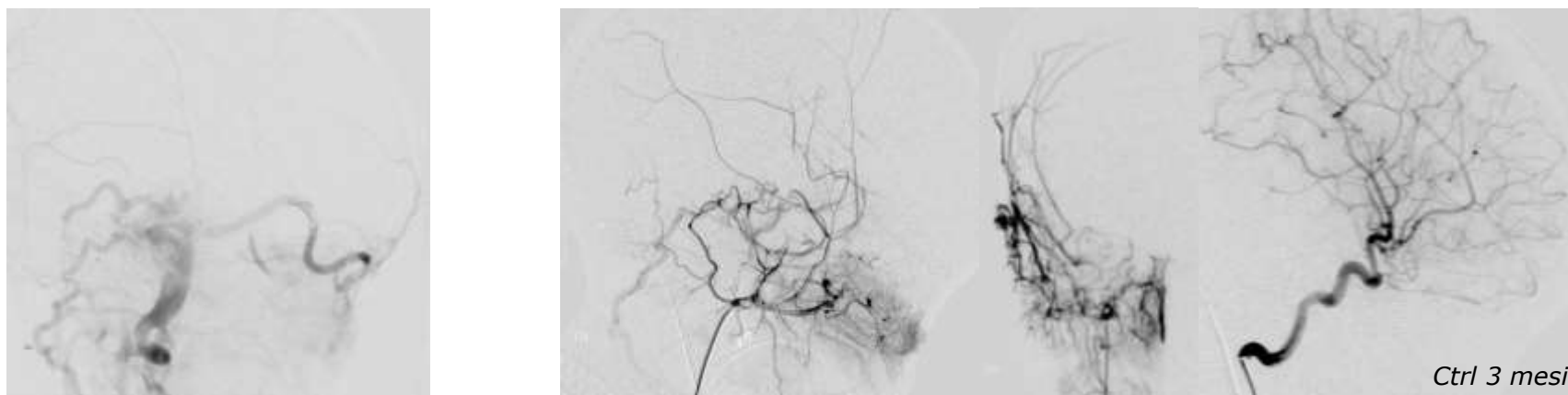




Cianoacrilato + Lipiodol

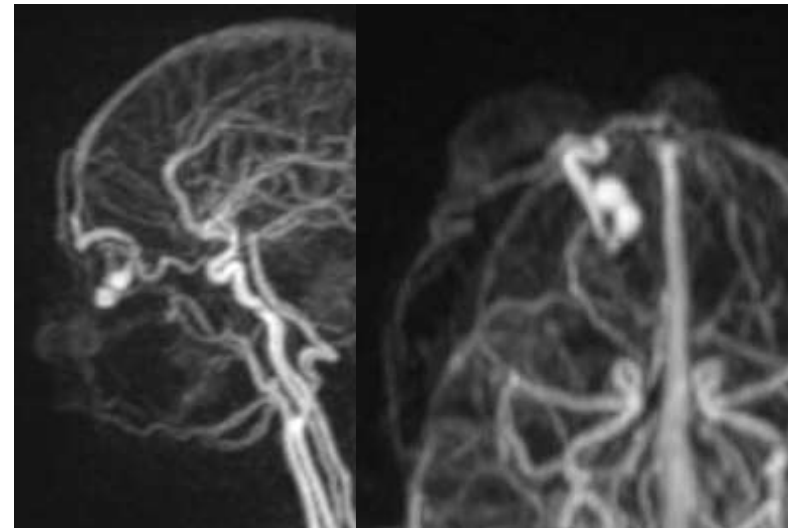
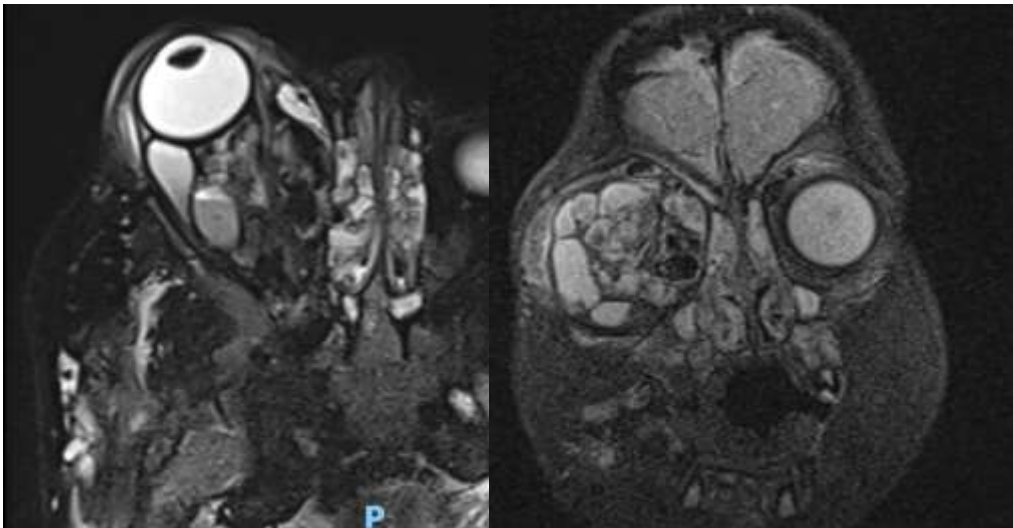
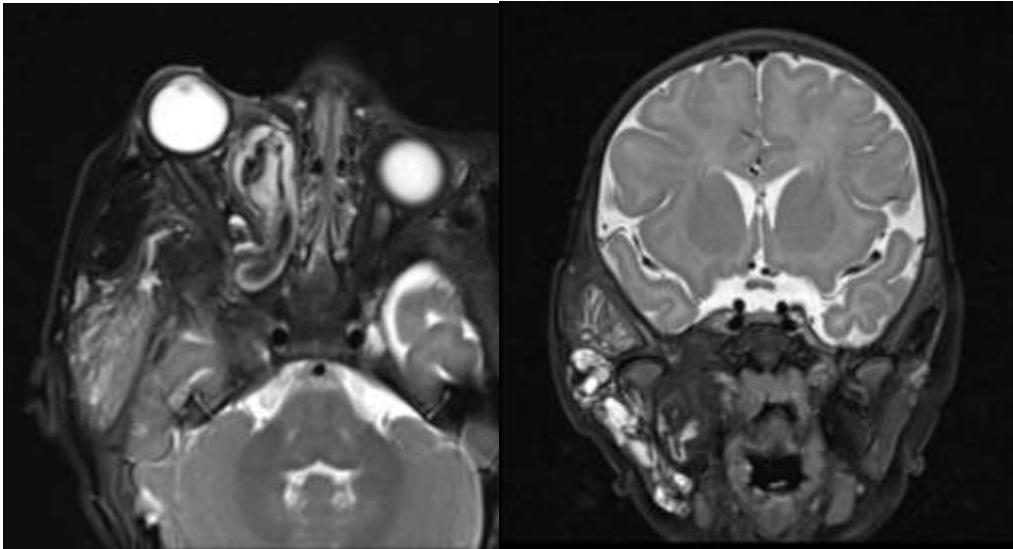


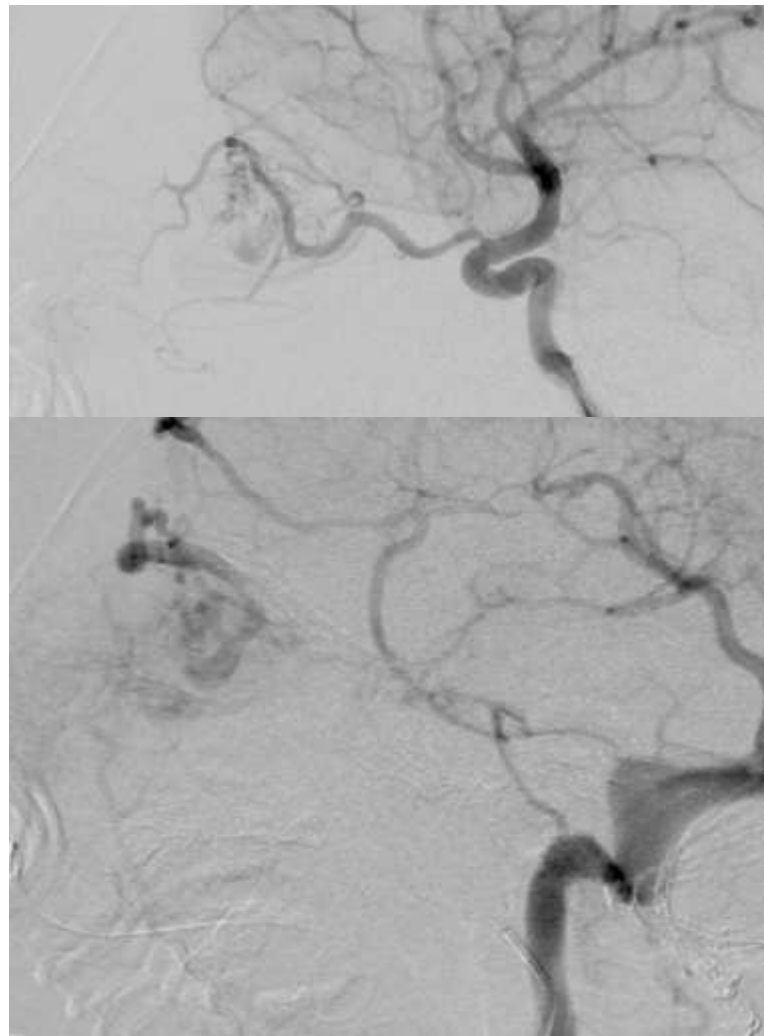
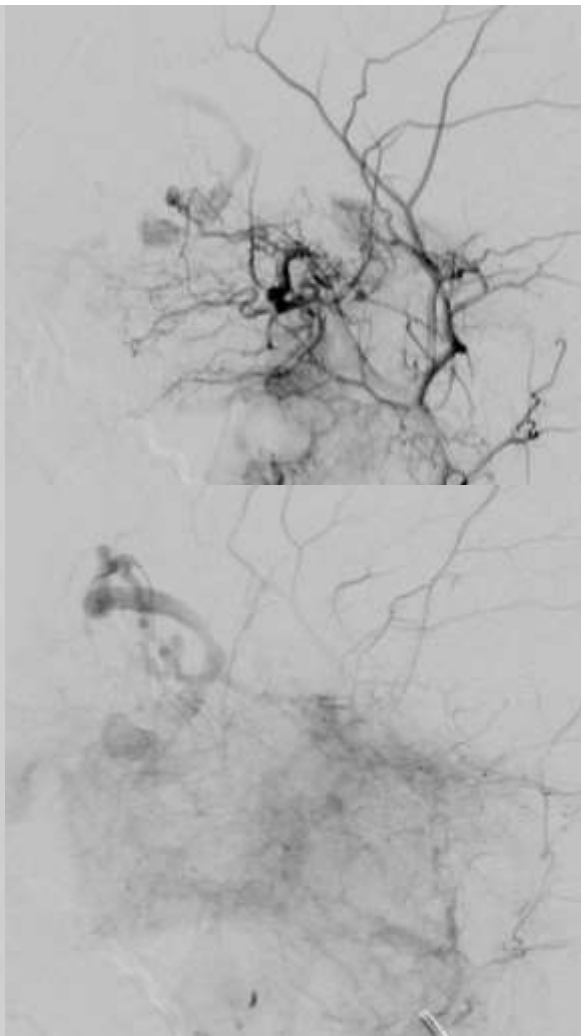
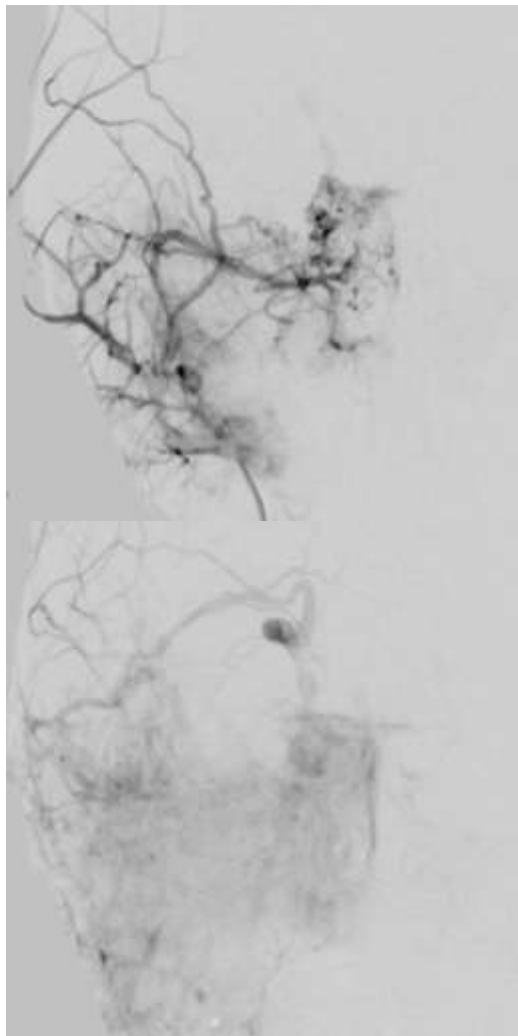
Cianoacrilato + Lipiodol

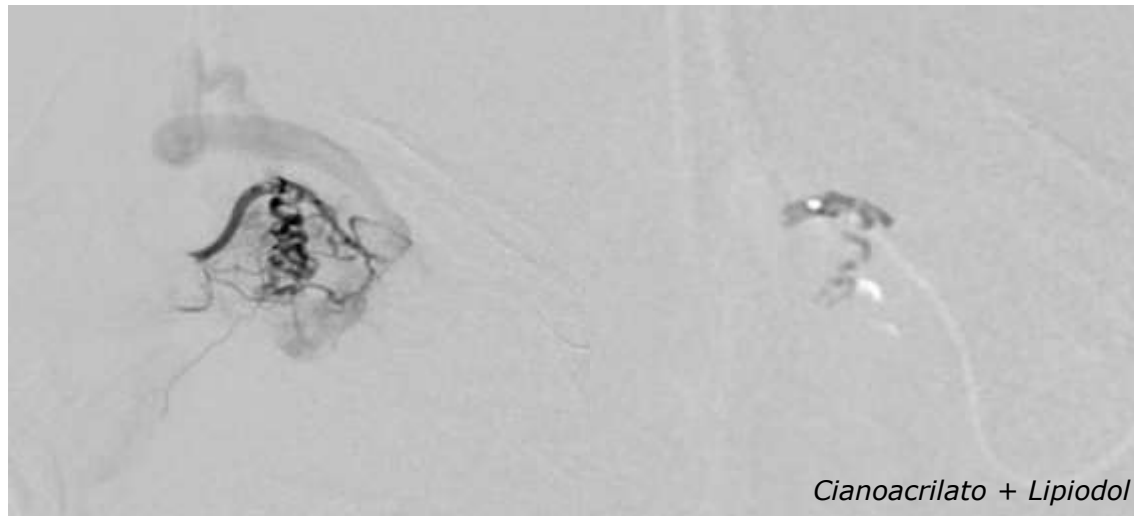


Ctrl 3 mesi

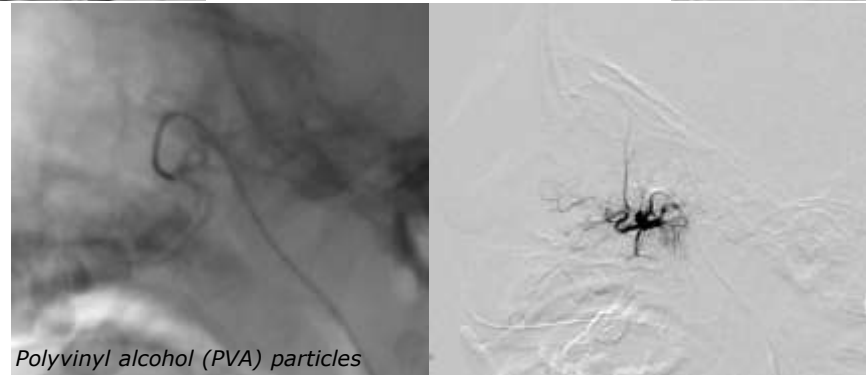
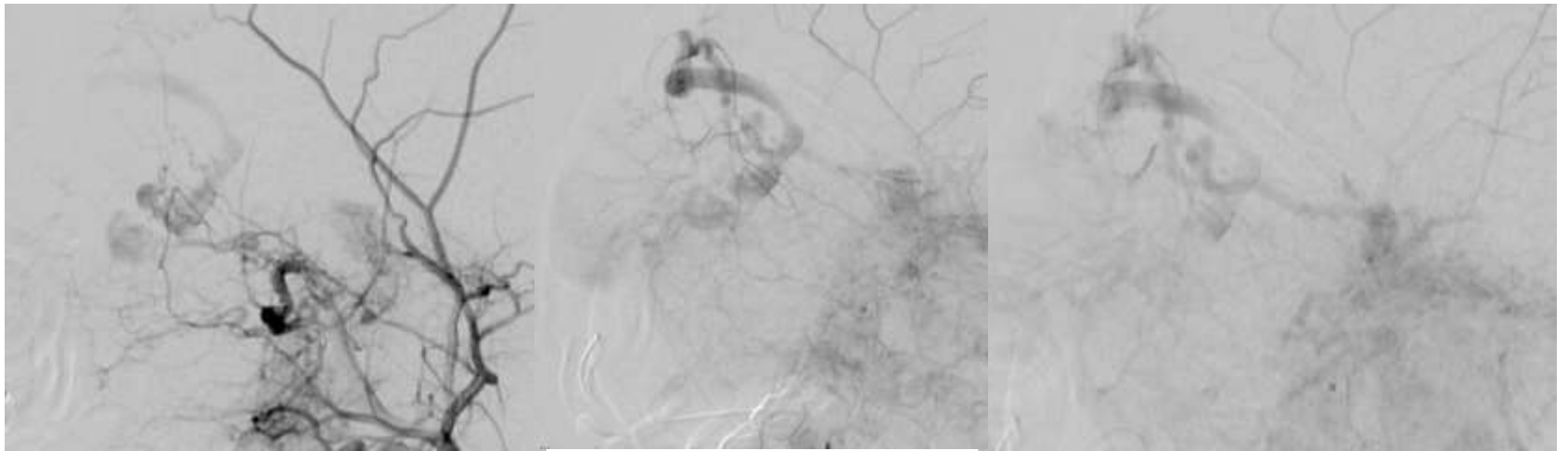
♀, 18 mesi, malformazione vascolare di tipo misto





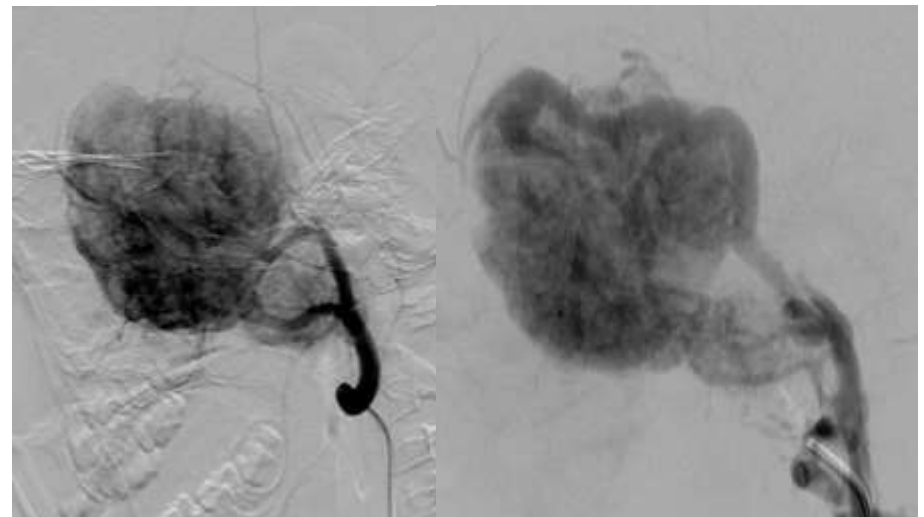
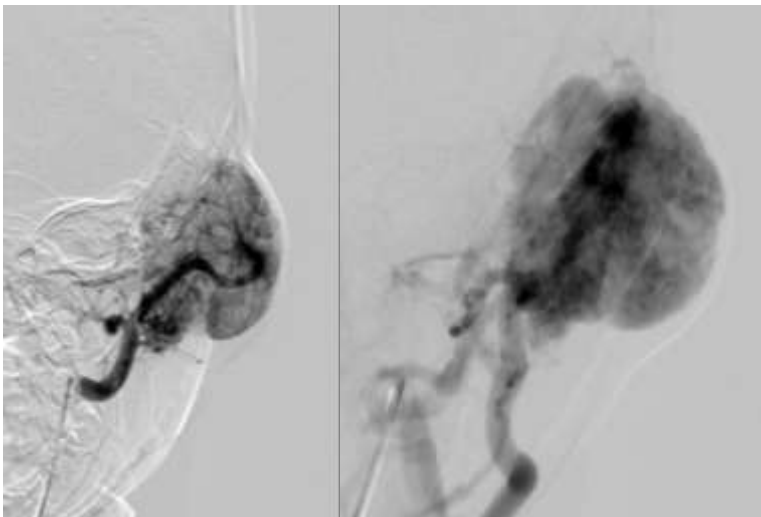
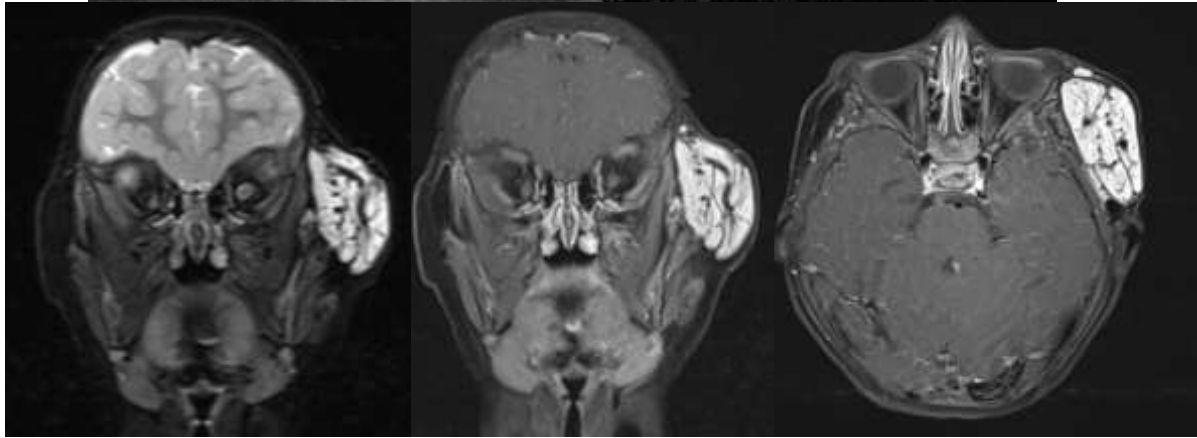
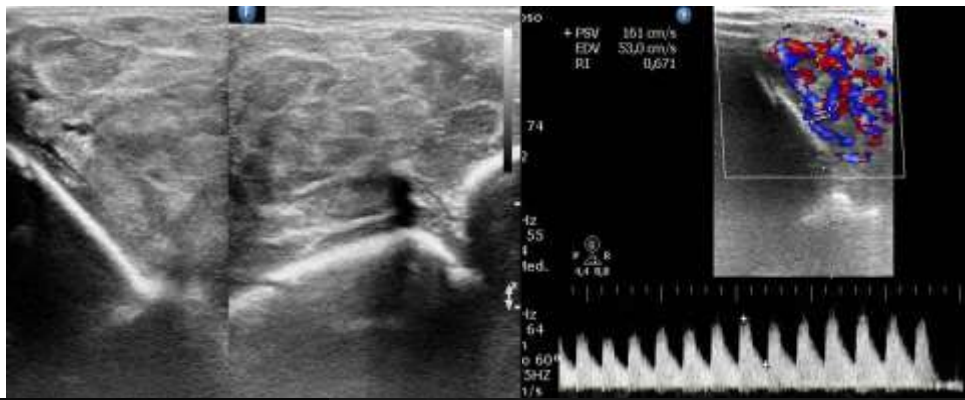


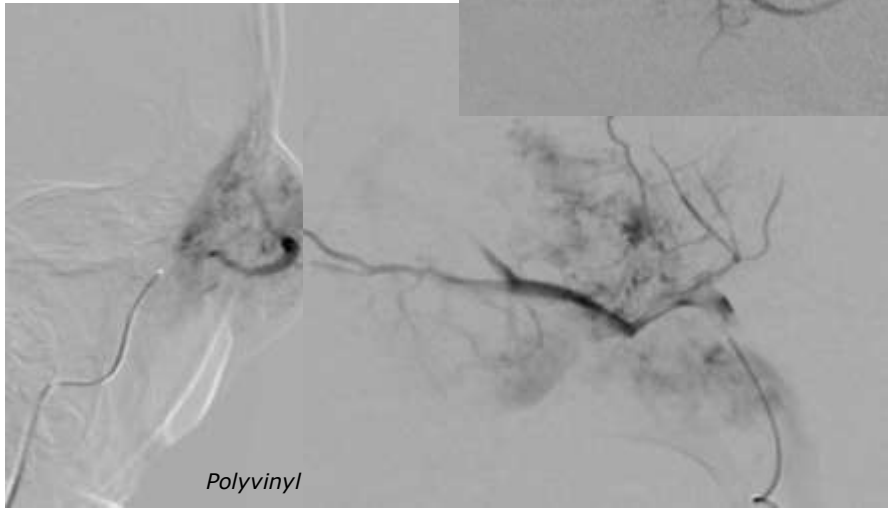
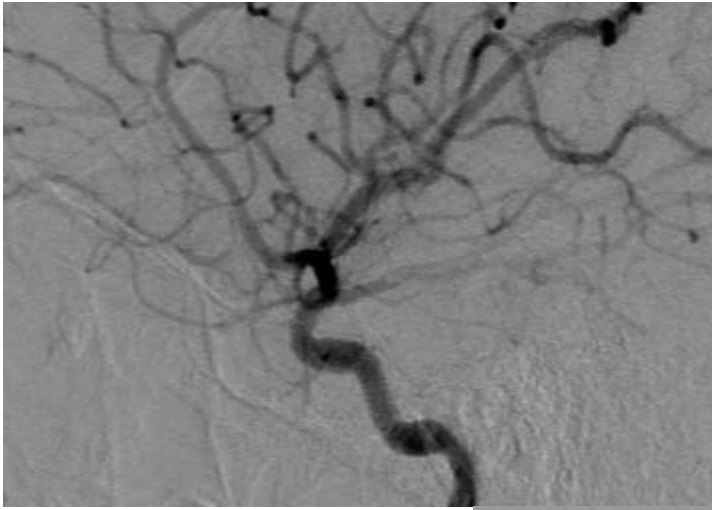
Cianoacrilato + Lipiodol



Polyvinyl alcohol (PVA) particles

♀, 2a 5m, emangioma infantile





Polyvinyl

CONCLUSIONI

- «**Dangerous Extracranial–Intracranial Anastomoses**»

- *Non sempre visualizzabili, ma **sempre presenti!!!***

- *visualizzabili:* - *circolazione collaterale di rivascolarizzazione in caso di occlusione vascolare*
- *aumentata pressione intrarteriosa (durante embolizzazione o iniezioni superselettive)*
- *shunt ad alto flusso*

- Scelta appropriata del **materiale embolizzante**

- Evitare **complicanze gravi**

- *cecità (occlusione arteria centrale della retina)*

- *stroke embolico (reflusso retrogrado nella circolazione intracranica)*