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Title of the presentation: PRE AND POST TREATMENT EVALUATION OF THE PATIENTS WITH DURAL AV FISTULA IN TERTIARY CARE CENTRE

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Introduction/ Review of Literature:

- DAVFs are pathologic shunts between dural arteries and dural venous sinuses, meningeal veins, or cortical veins.
- DAVFs are distinguished from parenchymal or pial arteriovenous malformations by the presence of a dural arterial supply and the absence of a parenchymal nidus.

BORDEN AND COLLEAGUES CLASSIFICATION

Type I. Dural AVFs that drain directly into a dural venous sinus or meningeal vein.

Type II. Dural AVFs that drain into a dural venous sinus with retrograde drainage into subarachnoid veins.

Type III. Dural AVFs that drain directly into subarachnoid veins.

Further classification into subtypes *a* and *b* indicate single or multiple fistulas, respectively.

Aims/ Objectives:

- AIM:
  An observational study to evaluate patients with dural arteriovenous fistulas in tertiary care centre.

- OBJECTIVE:
  Pre and post endovascular treatment evaluation of symptomatic patients with dural arterio-venous fistula.

Methodology:

PLACE OF STUDY: Tertiary care hospital
DURATION: 12 months
TYPE OF STUDY: Prospective observational
SAMPLE SIZE:31
INCLUSION CRITERIA:

- Patients with symptomatic dural AVF
- Patients giving informed consent

EXCLUSION CRITERIA:

- Patients with asymptomatic dural AVF
- Patients not giving informed consent.

Patients admitted in tertiary care centre will undergo diagnostic imaging i.e. CT brain. Digital subtraction angiography (DSA) is the method of reference for imaging of dural arteriovenous fistula.

If post treatment patients have worsening of symptoms, follow up with DSA done to characterize fistula grading, location of fistulous point, and fistula obliteration after treatment.

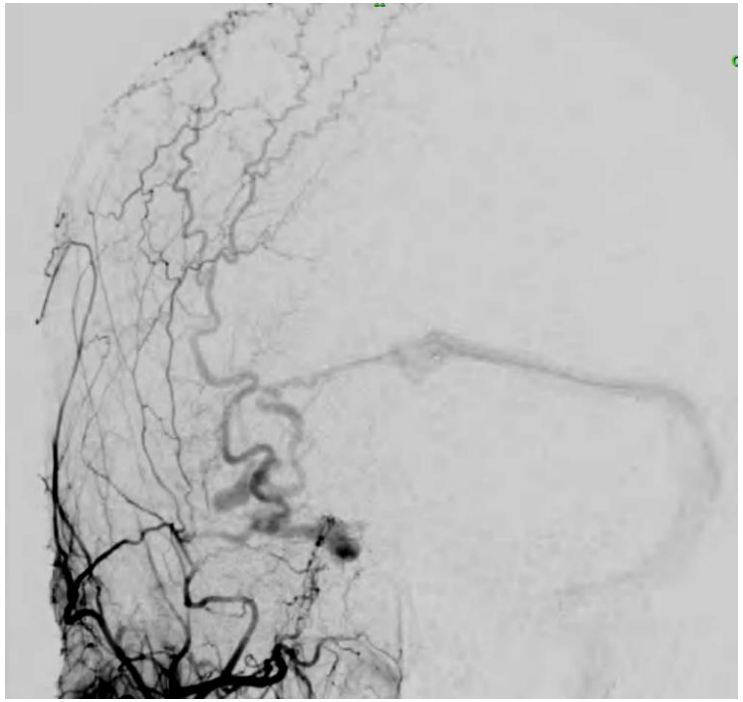
Results:

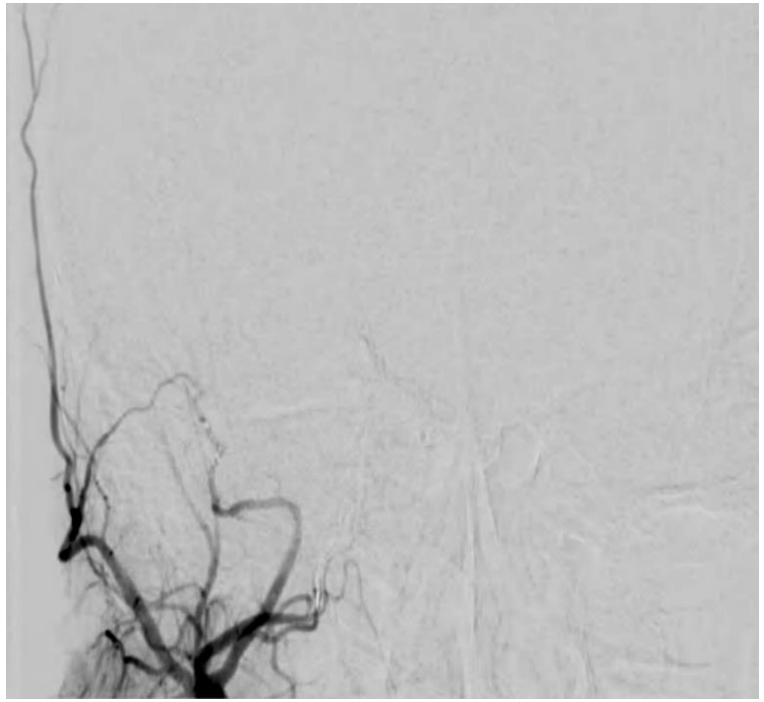
Variables		Pre		Post		P value
		Frequency	Percentage	Frequency	Percentage	
Headache	Present	27	87.1%	27	19.4%	0.02*
	Absent	4	12.9%	20	64.5%	
	Deceased	0	0.0%	5	16.1%	
Visual disturbance	Present	24	77.4%	1	3.2%	0.001*
	Absent	7	22.6%	30	96.8%	
Giddiness	Present	25	80.6%	7	22.6%	0.03*
	Absent	6	19.4%	24	77.4%	
Neurological focal deficit	Present	31	100.0%	0	0.0%	0.001*
	Absent	0	0.0%	26	83.9%	
	Deceased	0	0.0%	5	16.1%	
Papillo edema	Present	29	93.5%	1	3.2%	0.04*
	Absent	2	6.5%	30	96.8%	
DAVF	Present	31	100.0%	0	0.0%	0.003*
	Absent	0	0.0%	31	100.0%	

Representative images:

Pre and post embolisation DSA images

Images reveal slow flow Dural AVF of petrosal veins plexus at base of skull supplied by branch of right MMA, meningeal branches of sphenopalatine trunk.





Conclusion:

- There is a statistically significant correlation between endovascular treatment given and reduction in prevalence of predominant signs and symptoms of dural AVF.
- Hence, endovascular treatment can be a suitable alternative to the open surgery for the management of dural AVF.

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