SPECTRUM INDIA 2024

8TH - 10TH NOVEMBER, 2024 | GRAND HYATT MUMBAI

Registration number: 618

Title of the presentation: EMBOLISATION OF INTRACRANIAL MENINGIOMAS- BENEFITS OVER COMPLICATION

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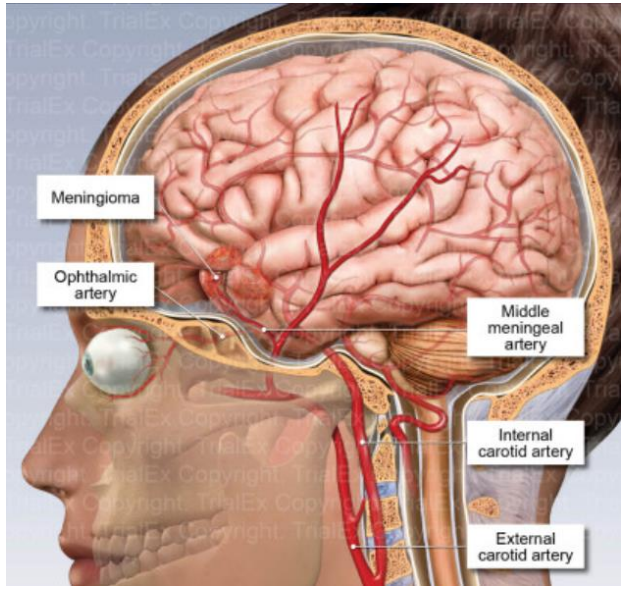
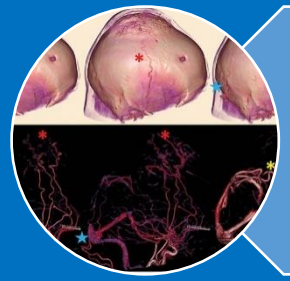
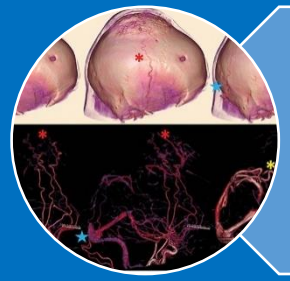


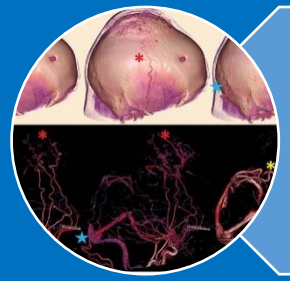
INTRODUCTION/ REVIEW OF LITERATURE:



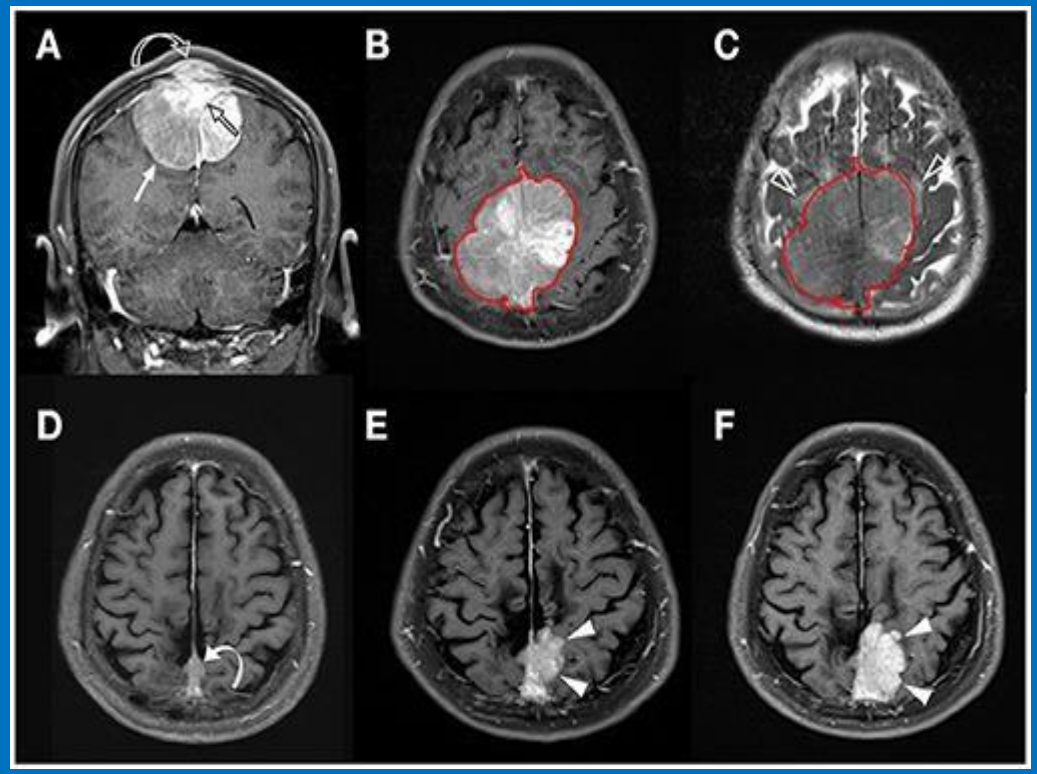
Pre-operative embolization of intracranial meningiomas offers potential advantages for safer and more effective surgery



It has been used as option for adjunctive treatment of intracranial meningiomas for almost 4 decades

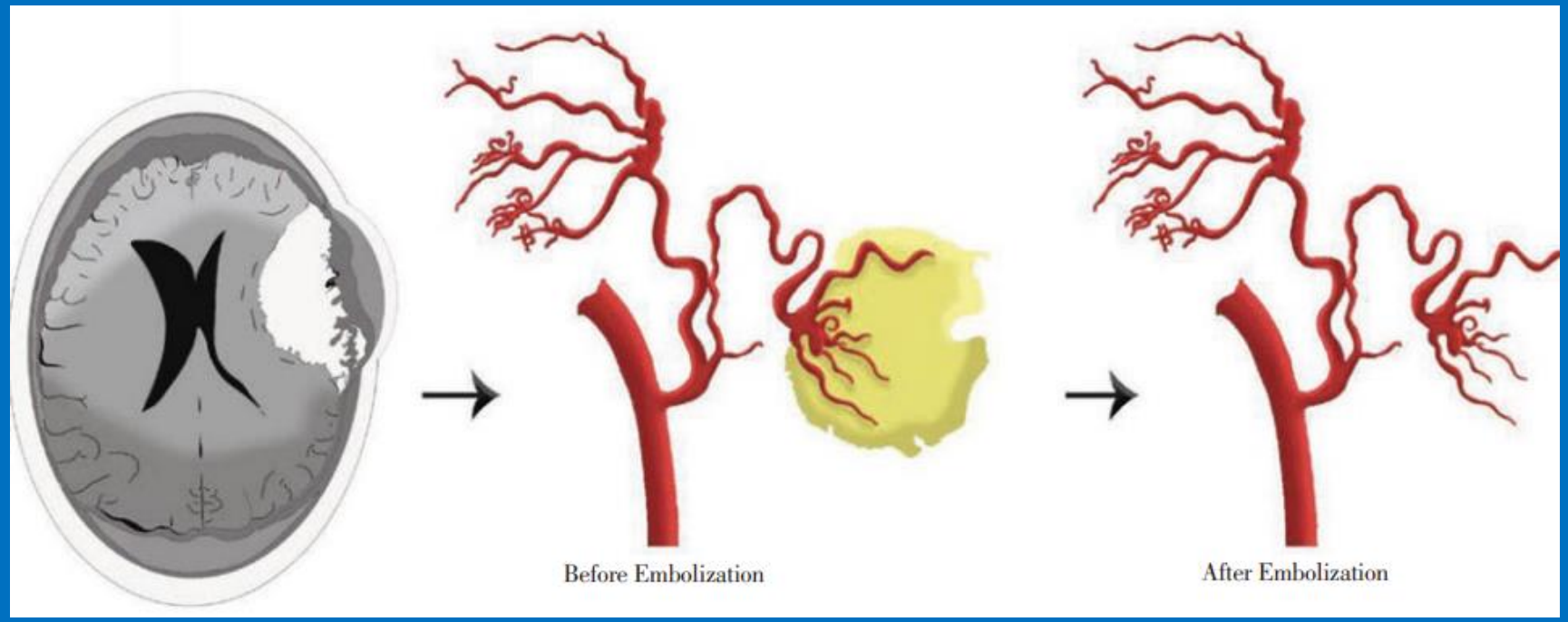


Meningiomas are supplied by middle meningeal artery ,accessory meningeal arteries ,ascending pharyngeal arteries or occipital branches of external carotid artery which are easily accessible by selective microcatherisation



AIMS/ OBJECTIVES:

- To understand the efficacy , technical considerations associated with preoperative embolization of meningioma
- To understand the complications associated with the technique



METHODOLOGY:

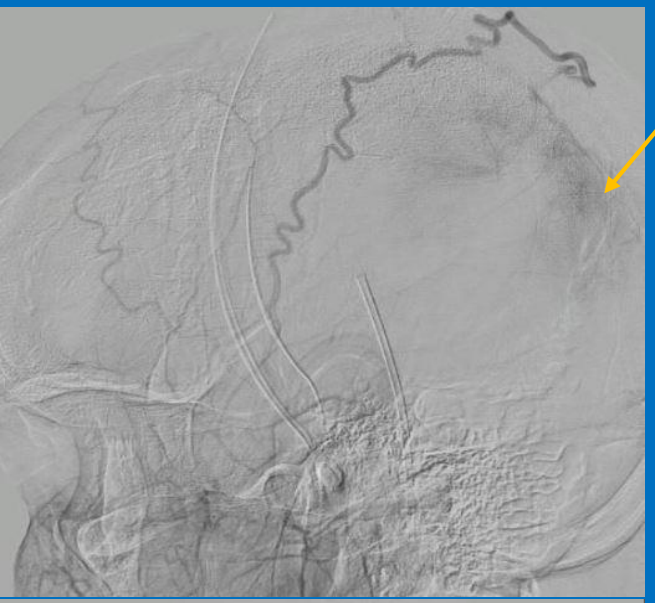
- A retrospective study was conducted in study period between 2022 (JANUARY to SEPTEMBER 2024)
- A total number of 11 subjects admitted to department of Interventional radiology were analysed.
- Following parameters were assessed
  - Gender
  - Mean age
  - Arteries used for embolization
  - Benefits following embolization
  - Materials used for embolization

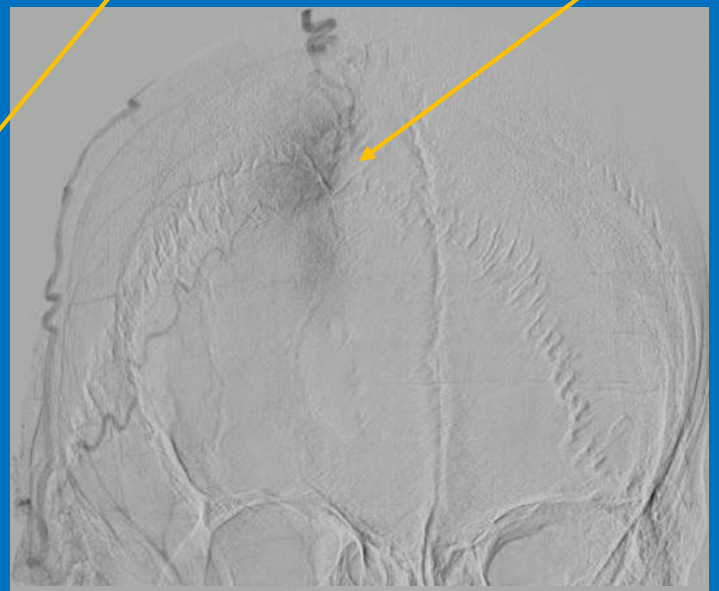
RESULTS:

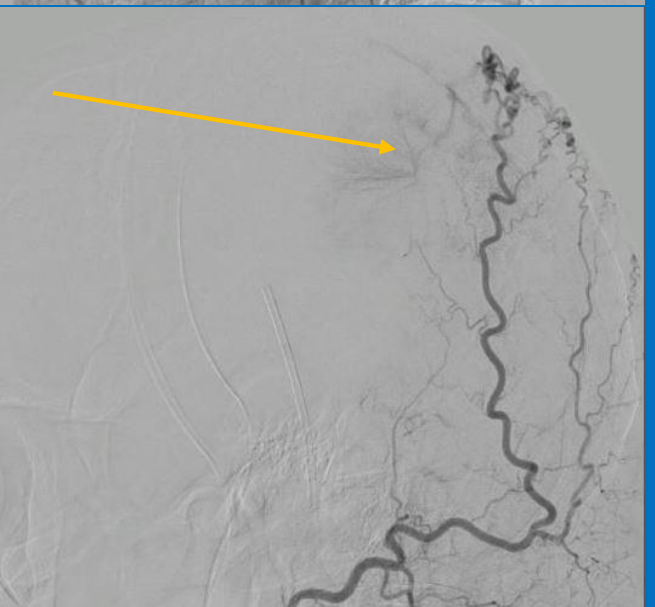
- Over a period of 1 year , 9months , 11 patients were selected – mean age was 50 .The median follow up period was 12months
- Diagnosed with meningioma based on typical imaging findings and clinical symptoms
- Patients underwent embolization of meningioma using PVA particles
- Successful embolization was determined by absence of blush from arteries (MMA , occipital artery etc) during check angiogram
- All the patients tolerated procedure well
- Patients were monitored in the ward
- 11 Patients who underwent surgical resection following procedure – the risk of complications such as bleeding during surgery was lesser
- The rate of complications of patients were 0 %

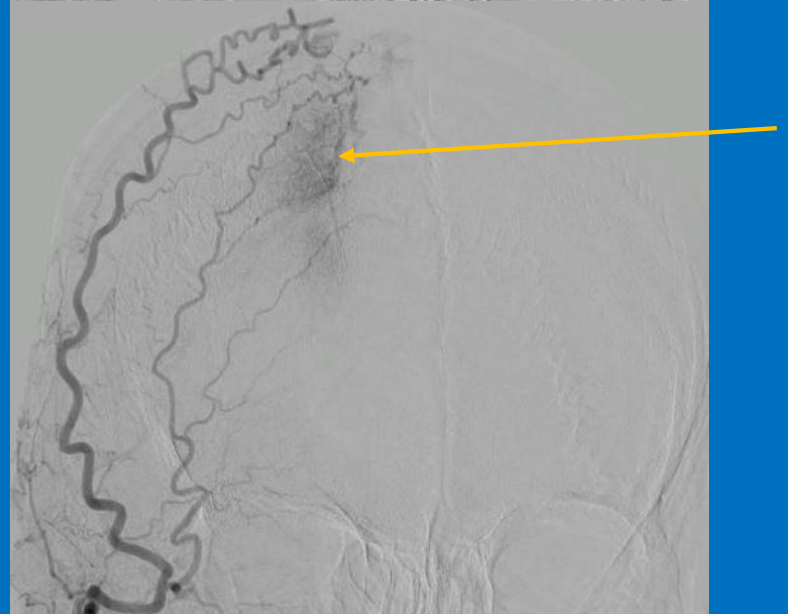
Representative images:

PRE-EMBOLIZATION

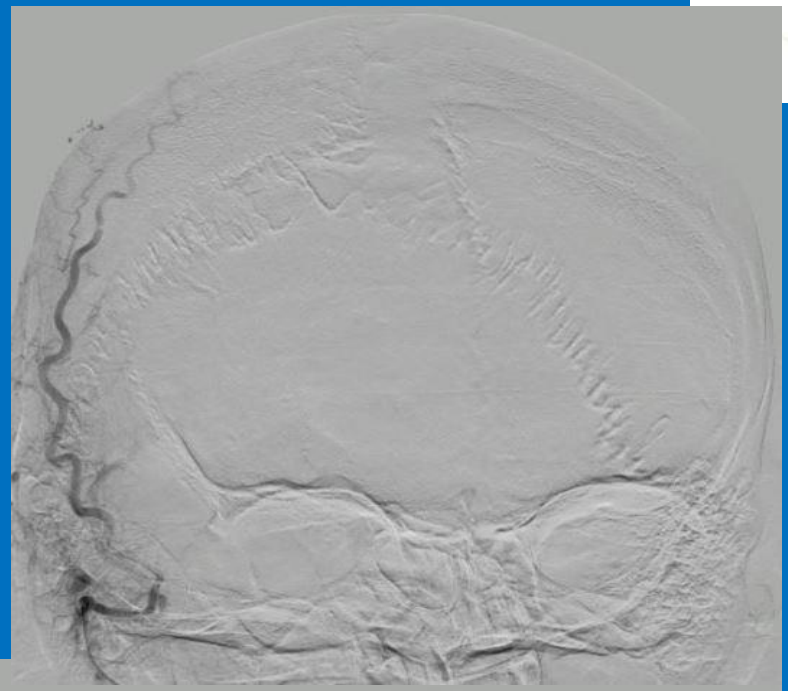


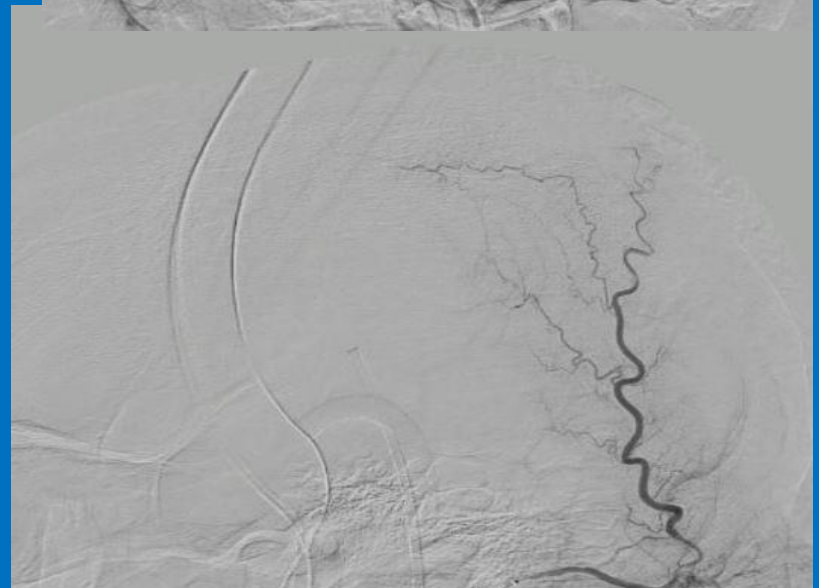






POST EMBOLIZATION





CONCLUSION:

- Smaller meningiomas near the cortical surface with mild to moderate blood supply that exhibit low surgical risk most often do not require preoperative embolization.
- Meningiomas more likely to benefit from embolization are large convexity meningiomas with a vast arterial supply emanating from multiple sources in which profuse bleeding can be encountered with surgical removal of the bone flap.
- Meningiomas at the skull base are more likely to benefit from embolization, but are more challenging to treat owing to potential com plications related to embolic risk of dangerous anastomoses and cranial nerve injury. In rare situations, palliative embolization can be used effectively.
- The role for preoperative embolization of meningiomas remains unclear. The goals for embolization need to be discussed with the operative surgeon to best facilitate surgical benefit.

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