

Characteristics of Arteriovenous Malformations in a Mexico City Hospital

Juan de Dios Del Castillo-Calcano MD; Heberseleth Valdivia-Chiñas MD; Irina J Bercholz-Urinowsky MD; Ulises Garcia-Gonzalez

Neurosurgery Department; Pediatrics Department. Mexican Oil Company South Central Hospital; Mexico City, Mexico



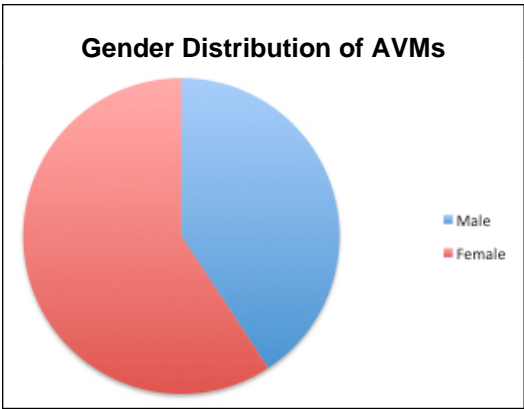
Introduction

Cerebral arteriovenous malformations (CAVMs), also known as classic brain AVMs, are a common form of cerebral vascular malformation and are composed of a nidus of vessels through which arteriovenous shunting occur. (1)

Overall AVMs are thought to occur in approximately 4% of the population, but become symptomatic in only 12% of affected individuals. There is no gender predilection. (1)

Methods

A retrospective chart review from September 1st 2010 to September 30th 2015 using ICD10 coding Q282 for vascular malformations of the brain in our institution archives.

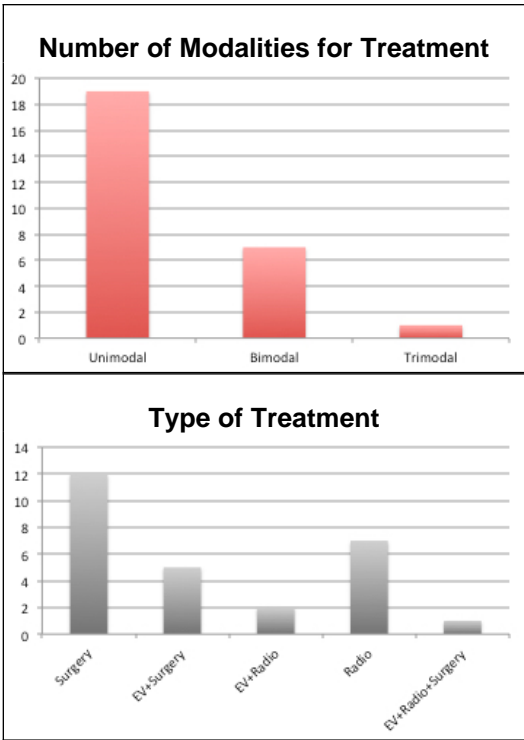
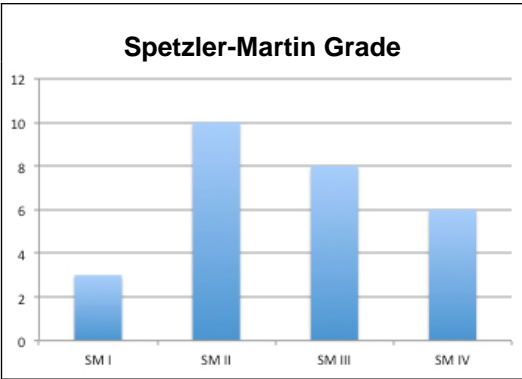


Results

We found 27 subjects with the diagnosis of vascular malformations of the brain in our retrospective search, 16 were female (59.2%), with a mean age of presentation of 44.74 years (SD 17.09 years), in the Spetzler-Martin classification we had 3 subjects with grade I, 10 with grade II, 8 with grade III and 6 with grade IV.

In words of treatment, 2 of the SM grade IV AVMs refused treatment, 7 received double modality of treatment and 1 subject received all 3 different modalities, 7 of all subjects were treated surgically, 13 endovascularly and 13 were sent to radiosurgery.

Our patients have been followed for a mean time of 26.33 months (SD 16.71 months) with excellent outcomes, 17 (62%) of subjects were classified in their latest consult as 5 in the Glasgow Outcome Scale, 8 (29.6%) as 4, and only 2 (7.4%) in 3



Conclusions

The epidemiology of AVMs in our institution is similar to those reported previously in the literature for the amount of population we care for, our treatment strategy is different to that reported on the literature due to the economic characteristics of our population, we report no patients that died because our hospital is a reference center for other hospitals in rural Mexico and most of our referred patients were incidental findings or presented with seizures or steal phenomenon, only one subject was referred in acute bleeding.

Learning Objectives

To acknowledge epidemiology of AVMs in a Mexican Hospital

References

1.- Ogilvy CS, Stieg PE, Awad I, Brown RD Jr, Kondziolka D, Rosenwasser R. AHA Scientific Statement: Recommendations for the management of intracranial arteriovenous malformations: a statement for healthcare professionals from a special writing group of the Stroke Council, American Stroke Association. Stroke. 2001 Jun. 32(6):1458-71.