



Characteristics, Presentation, Management and Outcome of Pediatric Intracranial Aneurysms

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Introduction

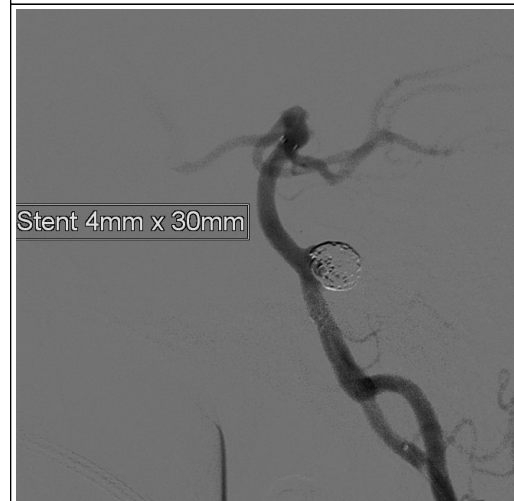
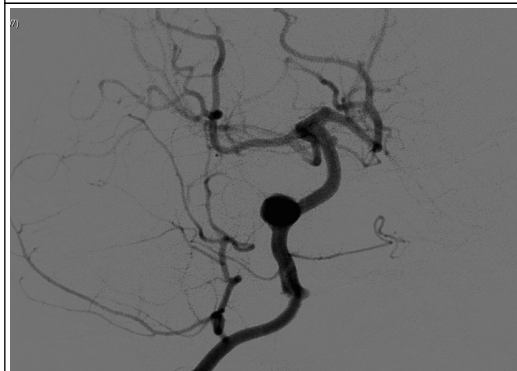
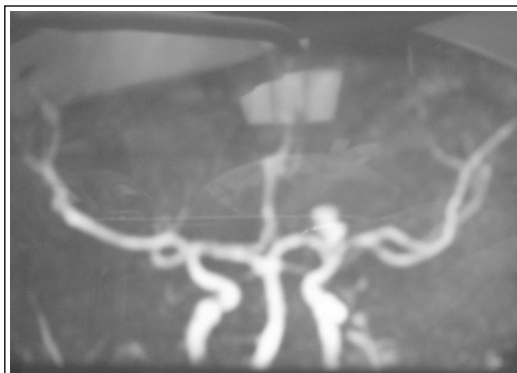
Pediatric aneurysms are rare and poorly understood as compared to those in adults. The aim of our study is to characterize the clinical, imaging, presentation, management, and outcome of patients younger than 18 years diagnosed with intracranial aneurysms at our institute.

Methods

a retrospective review of patients presented with intracranial aneurysms managed in our center from 2007-2014.

Results

Of 180 patients with intracranial aneurysms, 15 pediatric patients (8.2%) harboring 25 aneurysms were treated using microsurgical or endovascular techniques. Nine patients (65%) presented with subarachnoid hemorrhage. Most of the aneurysms located at the anterior circulation (87.5%). Eight patients (58%) had their aneurysms located at the carotid artery bifurcation (CAB). Most of the aneurysms were small in size with wide necks and irregular shape, 4 patients had giant non ruptured aneurysms. One patient had 8 aneurysms located at different locations and he experienced 2 attacks of SAH from 2 different aneurysms at 4 years interval and he died due to the second attack, another patient had 2 SAH attacks with 7 years interval the second attack was from ruptured do novo right PCom aneurysm. Most of the patients (84%) treated by microsurgical clipping of their aneurysms. Twelve patients (86%) had good outcome and only one patient died in our series.



Conclusions

Pediatric Intracranial aneurysms pose considerable diagnostic and therapeutic challenges. Good outcome was achieved with both surgical and neurointerventional management of pediatric patients with intracranial aneurysms. Long life follow up with either CTA or angiogram should be considered for these patients.

Learning Objectives

to highlight the importance of the follow up of pediatric intracranial aneurysms