

	Complication			Mortality			Routine Discharge		
	n	%	P	n	%	P	n	%	P
Total Time to treat (hrs)	168	----	62	56.7	4	2.4	131	77.5	
≤48	115	33	77.1	16	45.7	0.188	3	2.0	0.209
>48	35	22.9					28	80.0	0.716
Age (yrs)									
>4			42	35.6	0	0	91	77.1	
0-9	33	19.6	17	51.5	0	0.0	30	90.0	0.087
10-14	51	30.4	21	41.2	1	0.6	37	72.6	
15-18	84	50.0	24	28.6	3	1.8	64	76.2	
Sex									
Male	92	55.1	33	35.9	2	2.2	69	75.0	
Female	75	44.9	29	38.7	2	2.7	61	81.3	0.325
Race									
White	61	50.4	22	36.1	2	1.7	47	77.1	0.875
Black	21	17.4	8	38.1	0	0.0	15	71.4	
Hispanic	22	18.2	11	50.0	0	0.0	18	81.8	
Asian	3	2.5	3	33.3	0	0.0	2	66.7	
Nat.Amer.	4	3.3	1	25.0	0	0.0	3	75.0	
Other	10	8.26	4	40.0	0	0.0	9	90.0	0.040
Adm. Source									
ED	51	31.1	27	52.9	1	2.0	37	72.6	
Transfer	40	24.4	15	37.5	1	2.5	29	72.5	
Health Fac.	6	3.7	2	33.3	0	0.0	2	50.0	
Routine	67	40.9	16	23.9	1	1.5	59	88.1	
EVD									
Yes	38	22.6	38	100	1	2.63	23	60.6	0.006
No	130	77.4	24	18.3	3	2.31	108	82.4	
Intervention									
Clip	95	59.0	43	45.3	3	3.16	69	72.6	
Coil	66	41.0	17	25.8	1	1.52	56	84.9	0.063
Severer score*									
1	15	12.1	0	0.0	0	0.0	14	93.3	
2	46	37.1	7	15.2	0	0.0	41	89.1	
3	33	26.6	17	41.5	3	7.3	29	70.7	
4	22	17.7	18	81.8	0	0.0	13	59.1	
Comorb. score			Unit	O.R.	Unit	O.R.	Unit	O.R.	
>0	----	----	2.3	27.8	1	2.0	15.9	1	2.2
						15.9		25	1

*Only patients admitted in 2010 and thereafter had data recorded for these covariates. ED = emergency department, EVD = external ventricular drain

Results

A total of 168 patients had aneurysms that were treated with surgical clipping and/or endovascular coiling. Perioperative mortality was 2.4% and the overall

	mean (days)	SE	Univariate p	Multivariate p
Total	14.2	1.2		
Time to treat (hrs)			0.0005	0.0007
≤48	12.1	1.5		
>48	22.9	2.7		
Age (yrs)			0.393	0.180
0-9	17.5	2.8		
10-14	14.1	2.2		
15-18	13.1	1.7		
Sex			0.482	0.655
Male	13.5	1.7		
Female	15.2	1.8		
Race			0.843	0.626
White	13.1	2.1		
Black	12.5	3.7		
Hispanic	17.0	3.6		
Asian	15.0	10.2		
Native American	10.2	8.2		
Other/unknown	18.6	5.2		
Comorbidity score*			>0.0001	0.046
Admission source			>0.0001	0.003
ED	17.8	2.1		
Transfer	17.4	2.4		
Health facility	33.1	6.2		
Routine	8.5	1.8		
EVD			>0.0001	0.0008
Yes	27.9	2.3		
No	10.3	1.2		
Intervention			0.442	0.738
Clipping	15.8	1.7		
Endovascular	12.6	1.8		
Severity score*			>0.0001	0.169
1	2.8	3.4		
2	7.2	1.9		
3	16.2	2.0		
4	30.1	2.8		

*Only patients admitted in 2002 and thereafter had data recorded for these covariates. ED – emergency department, EVD – external ventricular drain

Learning Objectives

By the end of the session, participants should be able to understand prognostic and treatment-related factors impacting outcomes in pediatric aneurysm treatment.