BSDS Capstone

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June 24 2019

Table 1. Patient characteristics by outcome.

	Total (N = 448)	Alive at F/up (n = 161)	Died (n = 287)	P-value
Age (Years)				
Mean ± SD	33.79 ± 15.84	30.45 ± 14.04	35.67 ± 16.50	0.001
Median (IQR)	31.01 (23.91, 39.70)	28.59 (22.51, 36.15)	32.29 (25.03, 44.29)	
Age (Years) - n(%)				
< 16	32 (7)	16 (10)	16 (6)	0.04
16 - 60	378 (84)	137 (85)	241 (84)	
60+	38 (8)	8 (5)	30 (10)	
Weight (kg)				
Mean ± SD	67.19 ± 14.42	65.53 ± 16.35	68.11 ± 13.14	0.21
Median (IQR)	70.00 (61.00, 76.00)	68 (60.00, 75.00)	70 (62.00, 76.00)	
Sex - n(%)				
Male	405 (90)	147 (91)	258 (90)	0.63
Female	43 (10)	14 (9)	29 (10)	
Patient Race - n(%)				
Black / African	445 (99)	160 (99)	285 (99)	1
Asian or Pacific Islander	3 (1)	1 (1)	2 (1)	
Mechanism of Injury - n(%)				
MVA/Bike	356 (81)	126 (79)	230 (82)	0.67
Assault/BFT	64 (15)	27 (17)	37 (13)	
Fall	13 (3)	4 (3)	9 (3)	
All Other	8 (2)	2 (1)	6 (2)	

Table 2. Pre-hospitalization factors by patient outcome.

	Total (N = 448)	Alive at F/up (n = 161)	Died (n = 287)	P-value
GCS Total Score				
Mean ± SD	5.69 ± 2.45	6.43 ± 2.61	5.21 ± 2.23	<0.001
Median (IQR)	6.00 (4.00, 7.00)	7.00 (5.00, 8.00)	5.00 (3.00, 7.00)	
Advanced Airway Management (Y/N)- n(%)				
Yes	68 (30)	22 (24)	46 (33)	0.17
No	162 (70)	68 (76)	94 (67)	
Lowest Recorded Oxygen Saturation (SaO2) %age				
Mean ± SD	94.19 ± 6.80	95.06 ± 4.20	93.62 ± 8.06	0.71
Median (IQR)	96 (92.00, 98.00)	96.00 (92.50, 98.00)	96 (92.00, 98.00)	

	Total (N = 448)	Alive at F/up (n = 161)	Died (n = 287)	P-value
Pre-Hospital Hypoxia - n(%)				
Yes	26/135 (19.26%)	9/54 (16.67%)	17/81 (20.99%)	0.41
No	109/135 (80.74%)	45/54 (83.33%)	64/81 (79.01%)	
Lowest Recorded Systolic BP (mmHG)				
Mean $\pm$ SD	122.40 $\pm$ 23.05	124.44 $\pm$ 22.08	121.13 $\pm$ 23.65	0.34
Median (IQR)	121 (110.00, 135.00)	127 (110.00, 136.50)	120.00 (110.00, 134.50)	
Pre-Hospital Hypotension - n(%)				
Yes	10/185 (5.41%)	3/71 (4.23%)	7/114 (6.14%)	0.16
No	175/185 (94.59%)	68/71 (95.77%)	107/114 (93.86%)	
Pre-Hospital IV (Y/N) - n(%)				
Yes	9 (4)	4 (5)	5 (4)	0.74
No	213 (96)	82 (95)	131 (96)	
Pre-Hospital Pupil Abnormalities (Y/N) - n(%)				
Yes	53/157 (33.76%)	22/63 (34.92%)	31/94 (32.98%)	0.8
No	104/157 (66.24%)	41/63 (65.08%)	63/94 (67.02%)	

Table 3. ED factors by patient outcome.

	Total (N = 448)	Alive at F/up (n = 161)	Died (n = 287)	P-value
Time to Arrival at ED (Hours)				
Mean $\pm$ SD	11.10 $\pm$ 10.14	10.98 $\pm$ 9.11	11.17 $\pm$ 10.69	0.85
Median (IQR)	8.00 (4.30, 14.00)	8.17 (4.42, 15.33)	7.81 (4.26, 13.60)	
GCS Total Score				
Mean $\pm$ SD	5.51 $\pm$ 1.87	6.25 $\pm$ 1.59	5.10 $\pm$ 1.89	<0.001
Median (IQR)	6.00 (4.00, 7.00)	7 (5.00, 7.00)	5 (3.00, 7.00)	
Advanced Airway Management (Y/N)- n(%)				
Yes	254 (57)	106 (66)	148 (52)	0.003
No	194 (43)	55 (34)	139 (48)	
Lowest Recorded Oxygen Saturation (SaO2) %age				
Mean $\pm$ SD	93.50 $\pm$ 10.45	94.38 $\pm$ 8.22	92.97 $\pm$ 11.55	0.97
Median (IQR)	97.00 (92.25, 99.00)	97 (93.50, 99.00)	97 (91.50, 100.00)	
ED Hypoxia - n(%)				
Yes	70 (17)	23 (15)	47 (18)	0.41
No	336 (83)	128 (85)	208 (82)	

	Total (N = 448)	Alive at F/up (n = 161)	Died (n = 287)	P-value
Lowest Recorded Systolic BP (mmHG)				
Mean ± SD	122.28 ± 24.42	122.14 ± 21.42	122.36 ± 26.04	0.96
Median (IQR)	123 (110.00, 140.00)	122.00 (110.00, 137.75)	123 (107.00, 140.00)	
ED Hypotension - n(%)				
Yes	41 (10)	11 (7)	30 (11)	0.16
No	388 (90)	147 (93)	241 (89)	
ED IV (Y/N) - n(%)				
Yes	41 (9)	11 (7)	30 (11)	0.28
No	400 (91)	147 (93)	253 (89)	
Abnormal Pupils in ED - n(%)				
Yes	221 (58)	86 (61)	135 (56)	0.3
No	0 (0)	0 (0)	0 (0)	
ED Bilateral Fixed & Dilated Pupils (Y/N) - n(%)				
Yes	59 (15)	15 (11)	44 (18)	0.056
No	328 (85)	126 (89)	202 (82)	
ED Pupil Asymmetry > 1mm - n(%)				
Yes	109 (29)	43 (30)	66 (27)	0.52
No	273 (71)	98 (70)	175 (73)	
Abnormal CT Scan (Y/N) - n(%)				
Yes	219 (82)	87 (72)	132 (90)	<0.001
No	48 (18)	34 (28)	14 (10)	

Table 4. DHR factors by patient outcome.

	Total (N = 448)	Alive at F/up (n = 161)	Died (n = 287)	P-value
DHR - Abnormal Pupils - n(%)				
Yes	246 (56)	70 (44)	176 (62)	<0.001
No	196 (44)	90 (56)	106 (38)	
DHR - Pupils Fixed and Dilated - n(%)				
Yes	128 (29)	22 (14)	106 (38)	0.23
No	314 (71)	138 (86)	176 (62)	
DHR - Pupil Asymmetry > 1mm - n(%)				
Yes	131 (30)	53 (33)	78 (28)	<0.001
No	311 (70)	107 (67)	204 (72)	
DHR - Hypotension - n(%)				
Yes	72 (16)	8 (5)	64 (22)	0.002
No	374 (84)	153 (95)	221 (78)	
DHR - Hypoxia - n(%)				
Yes	1 (2)	0 (0)	1 (3)	<0.001
No	52 (98)	24 (100)	28 (97)	