Cardiovascular Safety Profile of Electrical Stun Guns (TASER-X26): Effects of Cocaine Intoxication on Induction of Ventricular Fibrillation

Dhanunjaya Lakkireddy MD, Andrea Natale MD & Patrick Tchou MD



Disclosure & funding information



Background:

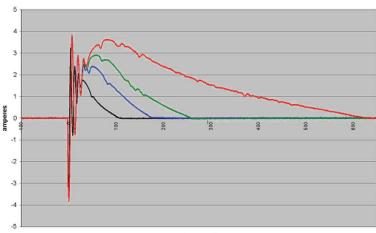








TASER X26 Current Waveforms



microseconds

—1X —5X —10X —30X





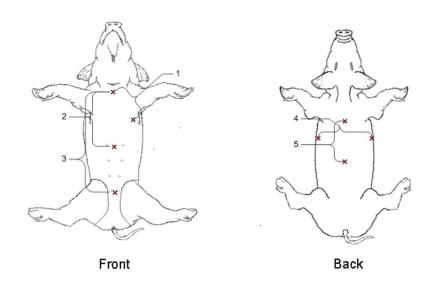


(Position-2),

(Position-3),

(Position-4)

(Position-5).

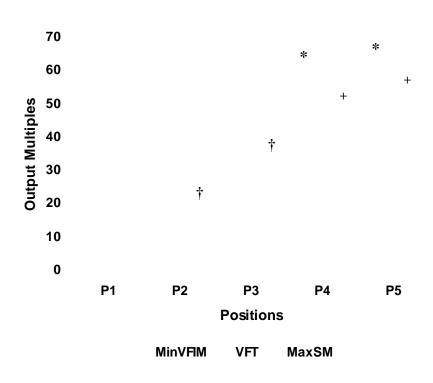


Cocaine infusion:

Results

Differences in VF vulnerability at the 5 tested positions

Comparisons of the five positions for MinVFIM and MaxSM (p<0.001, Friedman test). The symbols \dagger , *, and + indicate paired comparisons where p > 0.05 by the Wilcoxon test. All other paired comparisons had p< 0.05.





VF induction:



Loc	B-MaxSM	C-MaxSM	P	B-MinVFIM	C-MinVFIM	P	B-VFT	C-VFT	P
Pl	4.2±1.10	8.6±6.88	0.192	8.0±2.74	15.0±10.00	0.135	6.1±1.92	11.3±8.79	0.260
P2	12.0 ± 7. <i>5</i> 8	28.0 [±] 4.47	0.030	20.0±10.0	38.0 [±] 4.47	0.037	14 <i>5</i> ±9 59	33.0 [±] 4.47	0.032
P 3	22.0±8.37	50.0±18.71	0.009	32.0 [±] 837	60.0±18.71	0.009	27.0 [±] 8.37	55.0±18.71	0.009
P4	30.0±7.07	48.0±17.89	0.070	40.0±7.07	58.0±17.89	0.070	35.0 [±] 7.07	53.0 [±] 17.89	0.070
P5	38.0 *4 .47	60.0±14.14	0.011	48.0 [±] 4.47	70.0±14.14	0.011	43.0 [±] 4.47	65.0 [±] 14.14	0.011



Limitations



Public health implications



Conclusions

