



LITES SOAR Card_{v.3}

(Study Overview and Reference)



knowledge changing life

LITES Fentanyl vs Ketamine Trauma Pain Trial

Objectives

Compare fentanyl vs ketamine for pain in trauma patients in compensated shock

Inclusion Criteria

- Trauma activation AND transport to FH Level I Trauma Center
- Male ≥18; Female ≥50
- Compensated shock index (SI*) > 0.9
- IV Pain med indication (pain scale > 5)
- Pain control indicated by Pain Management Practice Guideline

*SI = HR/SBP

Exclusion Criteria

- Patients without IV access
- SBP > 180 mmHg at screening
- Contradiction to pain med (hypotensive)
- Advanced airway management
- Allergy to fentanyl OR ketamine
- Potentially pregnant people: Females < 50
- Prisoners: referred from jail or currently in police custody
- Wearing PAIN Opt Out bracelet
- Voiced objection by patient or family at scene

*****DO NOT USE IN CHILDREN UNDER 18 YRS OF AGE OR PREGNANT WOMEN *** MAY BE HARMFUL**

Consent Process

- This is an Exception form Informed Consent (EFIC) study. Prior consent is NOT required. Verbal refusals permitted

Key Steps

- ASSESS inclusion/exclusion criteria
- ADMINISTER dose 1 from kit (save packaging for trauma team)
- SCORE pain level 15 minutes after 1st dose
- ADMINISTER 2nd dose if needed
- TRANSFER PATIENT
- INPUT scan QR code on brown study kit bag and enter patient information
- EMS Providers WASTE remaining drug (into Cactus), document in OPIQ
- Hand empty package to treating team
- DOCUMENT LITES study drug administration, with control #, in ePCR

Key Contact

- Fire Department EMS Liaison
- Study contact – MCW EMS Research Team: litespain@mcw.edu



SHOCK INDEX REFERENCE TABLE



Shock Index: Heart rate/Systolic BP
Compensated shock SI > 0.9

		Heart Rate											
		70	80	90	100	110	120	130	140	150	160	170	180
Systolic Pressure	95	0.7	0.8	0.95	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9
	100	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
	105	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
	110	0.6	0.7	0.8	0.91	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.6
	115	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5	1.6
	120	0.6	0.7	0.8	0.8	0.92	1.0	1.1	1.2	1.3	1.3	1.4	1.5
	125	0.6	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.4
	130	0.5	0.6	0.7	0.8	0.8	0.92	1.0	1.1	1.2	1.2	1.3	1.4
	135	0.5	0.6	0.7	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3
	140	0.5	0.6	0.6	0.7	0.8	0.9	0.93	1.0	1.1	1.1	1.2	1.3
	145	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2
	150	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.93	1.0	1.1	1.1	1.2
	155	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.90	1.0	1.0	1.1	1.2
	160	0.4	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.94	1.0	1.1	1.1
	165	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.91	1.0	1.0	1.1
	170	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.94	1.0	1.1
	175	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.91	1.0	1.0
	180	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.94	1.0



Research
LITES RESEARCH PATHWAY
Practice Guideline

LITES STUDY DRUG														
LITES STUDY DRUG	ADULT DOSE	PEDIATRIC DOSE				ADMINISTRATION GUIDELINE				INDICATIONS	CONTRA-INDICATIONS	MACC		
Trauma Analgesia IV SLOW PUSH	0.1 mL/kg Max single dose 10 mL	Not indicated for age <18 yrs				IV Route only Volume-based dosing Up to two doses per pt				Acute trauma Pt meets criteria for LITES study enrollment	Age < 18 yrs Female < 50 yrs Pain score ≤ 5 Shock index ≤ 0.9 Complete exclusion criteria listed in PG LITES Research Pathway			
	Concentration: supplied in 10 mL syringes (blinded Fentanyl or Ketamine)				Blinded to receive <i>either</i> Fentanyl or Ketamine									
Trauma Analgesia (LITES study)	Weight (kg)	40	45	50	55	60	65	70	75	80	85	90	95	100
	Volume (0.1 mL/kg)	4 mL	4.5 mL	5 mL	5.5 mL	6 mL	6.5 mL	7 mL	7.5 mL	8 mL	8.5 mL	9 mL	9.5 mL	10 mL

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