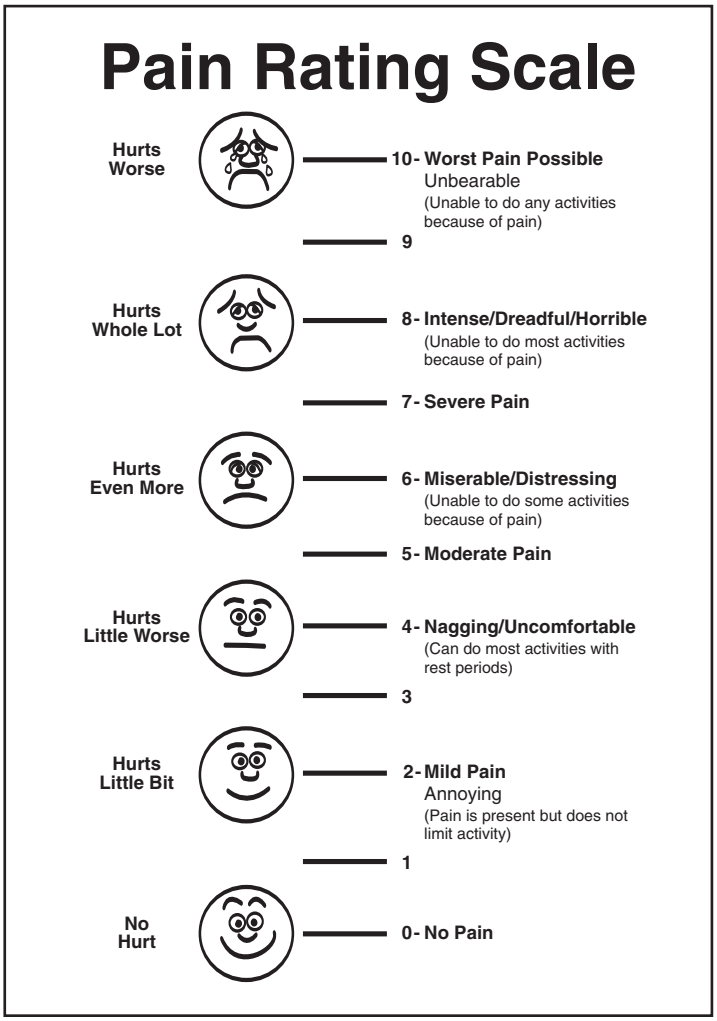
GG. PAIN MANAGEMENT (NEW ’10)

1. Initiate General Patient Care.

2. Presentation
   Pain may be present in many different conditions. Management of pain in the field can help to reduce suffering, make transport easier, and allow the emergency department personnel to initiate specific treatment sooner. Use of certain drugs for analgesia (reduction of pain) may also interfere with diagnostic procedures in the emergency department, and their use in such circumstances must be judicious, with medical control consulted when necessary.

3. Treatment Indications
   a) Measure level of pain. Ask adults to rate their pain on a scale from 0 **(no pain)** to 10 **(*worst pain imaginable*)**. Young children can be asked to rate their pain using the FACES scale, which provides 5 levels of pain perception.



PAIN MANAGEMENT (Continued)

b) Allow patient to remain in position of comfort unless contraindicated.
c) Monitor airway and vitals signs every 5 minutes for unstable patients
d) Mild pain

(1) Indications for pain management
  (a) Isolated musculoskeletal injuries such as sprains and strains
  (b) Pain related to childhood illnesses such as headache, ear infection, and pharyngitis
(2) Contraindications for pain management with acetaminophen
  (a) Head injury
  (b) Hypotension
  (c) Administration of acetaminophen or medications containing acetaminophen within the previous four hours
  (d) Inability to swallow or take medications by mouth
  (e) Respiratory distress
  (f) Persistent vomiting
  (g) Known or suspected liver disease
  (h) Allergy to acetaminophen
(3) Administer acetaminophen to patients ages 3 years and above judged to be in mild to moderate discomfort (2-5 on FACES scale) by child or parent.
  (a) Standard unit dosing of liquid preparation:
    (1) Less than 3 years of age: Not indicated
    (2) 3-5 years: Unit dose 160 mg/5 mL
    (3) 6-9 years: Unit dose 325 mg/10.15 mL or TWO unit doses of 160 mg/5mL each for a total of 320 mg/10mL
    (4) 10 years and above: Administer TWO unit doses of 325 mg/10.15 mL each for a total of 650 mg/20.3 mL or FOUR unit doses of 160/5 mL each for a total of 640 mg/20 mL
  (b) Obtain on-line medical direction for appropriate dosing for patients who are significantly underweight or overweight

NOTE: As of July 1, 2010, the only formulary to be purchased is the 160 mg/5mL

ADMINISTRATION OF ACETAMINOPHEN FOR MILD TO MODERATE PAIN DOES NOT ELIMINATE THE NEED FOR TRANSPORT OF THE PATIENT TO THE HOSPITAL TO RECEIVE A COMPREHENSIVE EVALUATION OF THE CAUSE OF HIS/HER PAIN AND APPROPRIATE DEFINITIVE TREATMENT.

e) Moderate to severe pain
(1) Indications for pain management
  (a) Acute myocardial infarction
  (b) Burns
  (c) Isolated injuries requiring pain relief such as suspected fractures or dislocations
  (d) Acute sickle cell pain crisis
  (e) Abdominal pain with consult
  (f) EMS/DNR Palliative Care Protocol (Option A or B)

I. BLS PHARMACOLOGY

1. ACETAMINOPHEN (NEW '10)

a) Indications

Patients ages 3 years and above judged to be in mild to moderate discomfort (e.g. 2-5 on FACES scale).

b) Adverse Effects

Not clinically significant

c) Precautions

Administration of acetaminophen for mild to moderate pain does not eliminate the need for transport of the patient to the hospital to receive a comprehensive evaluation of the cause of the pain and appropriate definitive treatment.

d) Contraindications

(1) Head Injury
(2) Hypotension
(3) Administration of acetaminophen or medications containing acetaminophen within the previous four hours

ALERT MANY COMMON COLD PREPARATIONS CONTAIN ACETAMINOPHEN.

(4) Inability to swallow or take medications by mouth
(5) Respiratory distress
(6) Persistent vomiting
(7) Known or suspected liver disease (including patients suspected of current alcohol ingestion)
(8) Allergy to acetaminophen

e) Preparations Use Unit Dose Only

(DO NOT USE MULTIDOSE BOTTLE)
(1) Unit dose 160 mg/5 mL
(2) Unit dose 325 mg/10.15 mL

f) Dosage

(1) Less than 3 years of age: Not indicated
(2) 3-5 years: Unit dose 160 mg/5 mL
(3) 6-9 years: Unit dose 325 mg/10.15 mL or TWO unit doses of 160 mg/5mL each for a total of 320 mg/10mL
(4) 10 years and above: Administer TWO unit doses of 325 mg/10.15 mL each for a total of 650 mg/20.3 mL or FOUR unit doses of 160/5 mL each for a total of 640 mg/20 mL
(5) Obtain on-line medical direction for appropriate dosing for patients who are significantly underweight or overweight.

J. ALS PHARMACOLOGY

1. ACETAMINOPHEN (NEW '10)

a) Indications

Patients ages 3 years and above judged to be in mild to moderate discomfort (e.g. 2-5 on FACES scale).

b) Adverse Effects

Not clinically significant

c) Precautions

Administration of acetaminophen for mild to moderate pain does not eliminate the need for transport of the patient to the hospital to receive a comprehensive evaluation of the cause of the pain and appropriate definitive treatment.

d) Contraindications

(1) Administration of acetaminophen or acetaminophen containing medications within the previous four hours

ALERT

MANY COMMON COLD PREPARATIONS CONTAIN ACETAMINOPHEN.

(2) Inability to swallow or take medications by mouth
(3) Respiratory distress
(4) Persistent vomiting
(5) Known or suspected liver disease (including patients suspected of current alcohol ingestion)
(6) Allergy to acetaminophen

e) Preparations Use Unit Dose Only

(DO NOT USE MULTIDOSE BOTTLE)
(1) Unit dose 160 mg/5 mL
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f) Dosage

(1) Less than 3 years of age: Not indicated
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(5) Obtain on-line medical direction for appropriate dosing for patients who are significantly underweight or overweight.

N6. RAMPART: The Rapid Anticonvulsant Medication Prior to Arrival Trial

PROTOCOL

RAMPART - A double-blind randomized clinical trial of the efficacy of IM midazolam (10 mg) versus IV lorazepam (4 mg) in the prehospital treatment of status epilepticus by paramedics or CRT-I.

1. INDICATIONS

The benefits of emergent treatment and termination of Status Epilepticus likely result from minimizing the consequences of impaired ventilation, pulmonary aspiration, hemodynamic instability, or metabolic derangements associated with prolonged convulsions. Rapid termination of seizures may also prevent kindling effects demonstrated in animal models in which seizures become more refractory to subsequent treatment as the duration of seizure increases.

2. PATIENT INCLUSION CRITERIA

Patients must be convulsing at the time of treatment to be enrolled.

a) Destination is a study participating hospit

b) Paramedics or CRT-I or reliable witnesses verify continuous or repeated convulsive seizure activity of more than 5 minutes.

OR

Patient does not regain consciousness (operationally defined as meaningful speech or obeying commands) between seizures.

c) Patient is still seizing on paramedic or CRT-I arrival.

OR

Patient isn't seizing, but is unresponsive on paramedic or CRT-I arrival and has a qualifying generalized seizure without regaining consciousness (as above).

3. PATIENT EXCLUSION CRITERIA

a) Patient is not 18 years of age or older.
b) Major trauma as the precipitant of the seizure.
c) Hypoglycemia (glucose less than 60 mg/dl).
d) Known allergy to midazolam or lorazepam.
e) Cardiac Arrest or Heart Rate (HR) < 40 beats per minute.
f) Medical Alert tag marked with "RAMPART declined."
g) Prior treatment of this seizure with diazepam autoinjector as part of another study.
h) Known pregnancy.
i) Prisoners.

4. PROCEDURE: INITIAL INCLUSION

a) Evaluate patient for unconsciousness or active seizure.
b) If the patient is unconscious, ask bystander/family if the patient had a seizure.

5. PROCEDURE: ASSESSMENT FOR EXCLUSION FROM STUDY

a) **Check pulse.** Pulse must be palpable with rate equal to or greater than 40 beats per minute. Exclude patients in whom seizure is the presenting symptom of cardiac arrest or hemodynamic collapse.

b) **RAPID ASSESSMENT:**

(i) Patient is wearing medical alert ID for allergy or sensitivity to midazolam or lorazepam or the statement "RAMPART" declined, do not enroll in this study.

(ii) Patient is a female of child-bearing-age; look at abdomen (rise in umbilicus = 20 weeks) to assess for possible pregnancy. Ask family if present. Do not enroll if this patient is suspected or known to be pregnant.

(iii) Check glucose level; if glucose is below 60, treat per protocol. Do not enroll in this study.

6. STUDY STEPS

a) Open RAMPART study box; say out loud for the voice recorder, **"patient is seizing and all study criteria are met."**

b) Give IM medication; say out loud **"IM med given"** and state time.

c) Start IV; say out loud **"IV access obtained."**

d) Administer IV med; say out loud **"IV med given"** and state time.

e) Say out loud **"patient no longer seizing"** if patient stops convulsing.

f) Continue standard of care with monitoring and charting of vital signs every 5 minutes or per local protocol – include pulse, BP, respiratory rate, cardiac rhythm, pulse oximetry, and airway management (nasal/oral airway, O_2, ET, etc.) if needed.

g) If patient is still seizing 10 minutes after last dose, refer to your local protocol for use of additional "rescue medication."
If rescue medication is given, say out loud **"rescue medication given."**

h) When you arrive at the ED, say out loud " arrival at ED" and say out loud whether "patient is seizing" or **"patient is not seizing."**

7. UPON ARRIVAL AT ED

a) Contact on-call study personnel.

b) Initiate RAMPART case replacement.