

GENERAL INFORMATION

TRAUMA - MIVT AND ETA
 CONSIDER MIXED MECHANISMS
 SOME RESUSCITATION MAY TAKE > 30MIN
 DNR-CC => COMFORT ONLY
 DNR-CCA => NORMAL CARE UNTIL ARREST
 FIELD TERMINATION MUST BE ≥ 18 Y/O
 PEA < 40 OR ASYSTOLE
 NO HYPOTHERMIA
 ADVANCED AIRWAY & VASCULAR ACCESS
 NO SIGNS OF NEURO FUNCTION+BS
 VERSED: 2mg=0.4ml, 4mg=0.8ml, 10 mg=2ml

ABDOMINAL PAIN

ONDANSETRON 4 mg IV/PO (OR 4 mg ORAL TABLET)
 ONDANSETRON 0.1 mg/kg IV
 SEE PAIN MANAGEMENT
 MCP FOR PAIN MANAGEMENT IN PED ABD PAIN

ACUTE MYOCARDIAL INFARCTION

OBTAIN 12 LEAD
 ALERT EXCLUSION - LBBB, PACEMAKER
 INFERIOR (CAUTION W/ NTG AND FENTANYL)
 LEADS II, III, aVF - OBTAIN V4R 12 LEAD
 FLUID CHALLENGE
 MAINTAIN SBP > 100
 TCP FOR 2ND DEG TYPE II AND 3RD DEG HB
 TCP 70 BPM @ 20 mA, MIDAZOLAM 2 mg
 ATROPINE 1 mg IV WHILE WAITING PACER
 NOREPI - 4 mg in 250 ml, 30 gtts/min, max 45 gtts
SEPTAL/ANTERIOR WALL - V1-V4
 NOREPI - 4 mg in 250 ml, 30 gtts/min, max 45 gtts

AIRWAY MAINTENANCE

2 LPM NC FOR COPD PT
 4-6 LPM NC FOR OTHER PATIENTS
 12-15 LPM BY NRB FOR TRAUMA OR DISTRESS
 2 ATTEMPTS OF ETT PRIOR TO ADJUNCT DEVICE
 PRIOR TO ETT, CONSIDER
 LIDOCAINE JELLY ON ET
 LIDOCAINE 100 mg IN OR NEB
 LIDOCAINE 1.5 mg/kg IN OR NEB (max 100 mg)
 RESIST ETT SBP>100 - KETAMINE 100 mg SLOW IV
 RESIST ETT SBP>100 - MIDAZOLAM 2 mg SLOW IV
 0.1 mg/kg SLOW IV (2.0 mg max)

ANAPHYLACTIC REACTION

≥30 kg EPI 1:1,000 0.5 mg IM OR BOTH EPI PENS
 ≥15 kg AND < 30 kg - ADULT EPI PEN OR
 EPI 1:1,000 0.01 mg/kg (0.1 ml/kg) IM max 0.3 mg
 <15 kg EPI PEN JR OR EPI 1:1000 0.01 mg/kg
 (0.1 ml/kg) IM max 0.15 mg
 REPEAT ABOVE DOSES AFTER 5 min
 IF WHEEZING, ALBUTEROL 2.5 mg NEB X 3
 ATROVENT 0.5 mg NEB
 IV NS WIDE OPEN FOR HYPOTENSION
 20 ml/kg NS IV TO MAINTAIN
 BENADRYL 50 mg IM/IV
 BENADRYL 1 mg/kg IM/IV (max 50 mg)
 STILL HYPOTENSIVE: EPI 1:10,000 0.1 mg IV q 3 min
 up to a max of 0.5 mg
 GLUCAGON 1 mg IV/IM UNRESPONSIVE TO EPI
 SOLU-MEDROL 125 mg IV: PEDS 2 mg/kg IV (max 125 mg)

ASTHMA/EMPHYSEMA/COPD

ALBUTEROL 2.5 mg NEBULIZED UP TO 3 TIMES
 ATROVENT 0.5 mg NEBULIZED
 PEDI SAME AS ABOVE
 LIDOCAINE 100 mg IN OR NEB PRIOR TO ETT
 1.5 mg/kg IN OR NEB - max 100 mg
 CONSIDER CPAP or {BiPAP} (≥ 16 y/o)
 AFTER ETT VENT 8-10 RPM / PEDS 10-15 RPM
 IF ARREST/UNSTABLE, BILATERAL DECOMPRESSION
 SEVERE ASTHMA: (NOT FOR EMPHYSEMA OR COPD)
 ≥ 30 kg, EPI 1:1,000 0.5 mg IM OR BOTH PENS
 ≥15 & <30 kg, EPI PEN OR EPI 1:1000 IM, max 0.3 mg
 < 15 kg, EPI JR OR 1:1000, 0.01 mg/kg IM, max 0.15 mg
 REPEAT ABOVE DOSES AFTER 5 min
 SOLU-MEDROL 125 mg IV: PEDS 2 mg/kg IV (max 125 mg)

BRADYCARDIA

FOR POOR PERFUSION
 ATROPINE 1 mg IV q 3-5 min UP TO 3 mg
 IF INEFFECTIVE BEGIN PACING
 TCP 70 BPM @ 20 mA till capture, MIDAZOLAM 2 mg
WIDE COMPLEX BRADYCARDIA: ADULT ONLY
 CALCIUM CHLORIDE 10% - 1 g IV
 FLUSH BEFORE SODIUM BICARB 100 mEq IV
 FOR POOR PERFUSION: CPR IF HR < 60 BPM
 EPI 0.01 mg/kg (0.1 ml/kg): 1:10,000 IV/IO q 5 min
 IF AV BLOCK CONSIDER:
 ATROPINE 0.02 mg/kg IV max 0.5 mg SINGLE DOSE
 MAY REPEAT 5 min - max 1 mg TOTAL DOSE
 TCP 80 BPM @ 5-200 Ma
 MIDAZOLAM 0.1 mg/kg IV/IO, max 2 mg

CARDIAC ARREST GENERAL INFO

RENAL DIALYSIS PTS IN ARREST
 CALCIUM CHLORIDE 10% - 1 g IV
 20 mg/kg (0.2 ml/kg) IV, max 500 mg
 (FLUSH) SODIUM BICARB - 100 mEq IV
 1 mEq/kg IV
RENAL DIALYSIS, WIDE COMPLEX BRADYCARDIA
 CALCIUM CHLORIDE 10% - 1 g IV
 (FLUSH) SODIUM BICARB 100 mEq IV

CHEST PAIN

SUPINE 12 LEAD EKG
 ASPIRIN 324 mg OR 4 X 81 mg CHEWED > 25 Y/O
 NITRO 0.4 mg SL EVERY 5 min X 3 SBP > 100
 CONSIDER PAIN CONTROL PROTOCOL
 FLUID 500 ml, IF SBP < 100, NO PUL EDEMA
 REPEAT FENTANYL 50 mcg IM IF OVER 15 min

COMBATIVE PATIENTS

KETAMINE 250 mg IM, repeat 2 min, 250 mg IM
 OR KETAMINE 100 mg IV, repeat 5 min
 ≥ 8 y/o, KETAMINE 1 mg/kg IV, max 100 mg
 or KETAMINE 5 mg/kg IM, max dose 250 mg/site X2
 AND/OR MIDAZOLAM 10 mg IN, 2 mg IV, 4 mg IM
 REPEAT MIDAZOLAM 5 mg IN, 2 mg IV, 4 mg IM
 MIDAZOLAM 0.2 mg/kg IN / IM, 0.1 mg/kg IV
 REPEAT PEDI KETAMINE DOSES WITH MCP

CRUSH SYNDROME

CONTACT MCP PRIOR TO RELEASE OF LOAD
 1 L FLUID BOLUS THEN 500 ml/HR - 20 ml/kg
 IF HYPOTENSIVE AND > 1HR, REPEAT BOLUS
 12 LEAD EKG
 NORMAL - SODIUM BICARB 100 mEq/IV, 1 mEq/kg
 AT EXTRICATION
 ABNORMAL: CALCIUM CHLORIDE, 1 g (Call Peds)
 ALBUTEROL: 10 mg NEB
 SODIUM BICARB 100 mEq, 1 mEq/kg
 SEDATION KETAMINE 250 mg IM, REPEAT 2 min
 SEDATION PEDS KETAMINE 5 mg/kg IM, max 250

EXTRAPYRAMIDAL REACTIONS

CONSIDER HYPOGLYCEMIA
 BENADRYL 50 mg IM/IV
 PEDS: BENADRYL 1 mg/kg IM/IV (max 50 mg)

FEVERS

TRANSPORT INFANTS < 2 MONTHS OF AGE WITH
 TEMP > 100.4 F OR < 96.0 F

HYPOGLYCEMIA

BS < 60, D10 250 ml IV, REPEAT IN 10 min
 D10 5 ml/kg max 250 ml
 NEWBORN BS < 40, D10 2 ml/kg
 IF NO IV, GLUCAGON 1 mg IM

NEONATAL RESUSCITATION

IF HR < 100 BPM, VENT 40-60 RPM
 IF HR < 60 BPM, CPR 3:1 AT 120 BPM
 EPI 1:10,000 0.01 mg/kg IV/IO
 REPEAT EPI DOSES EVERY 3-5 min
 IF HYPOVOLEMIC, NS 10 ml/kg OVER 5-10 min
 CONSIDER NARCAN 0.1 mg/kg IV/IO q 3 min

PAIN MANAGEMENT: NO KETAMINE FOR CHEST PAIN

FENTANYL UP TO 50-100 mcg IV/IN/IM SBP > 100
 REPEAT 50-100 mcg IV/IN/IM AFTER 15 min
 AND/OR KETAMINE 25 mg IV/IN OR 50 mg IM
 REPEAT 25 mg IV/IN OR 50 mg IM AFTER 15 min
 ≥ 2 Y/O FENTANYL 1 mcg/kg IN/IV/IM, max 100 mg
 REPEAT p 15 min (ADD EXTRA 0.1 ML to ALL DOSES)
IM FENTANYL FOR PEDS IS A LAST RESORT
NO FENTANYL <2 Y/O, NO KETAMINE <16 Y/O FOR PAIN

PEA / ASYSTOLE

CONSIDER TREATABLE CAUSES
 INITIATE QUALITY CPR FOR 2 min, 100-120 BPM
 EPI 1 mg 1:10,000 IV/IO EVERY 3-5 min
 EPI 0.01 mg/kg (0.1 ml/kg): 1:10,000 IV/IO q 3-5 min
POISONING / OVERDOSE
 NARCAN 4 mg IN/IM, 2 mg IV FOR RESPIRATIONS
 < 20 kg - 0.1 mg/kg IV/IN/IM (max 2mg), REPEAT X 1
 > 20 kg - 2 mg IV/IN/IM
 IF USING IN AND NO IMPROVEMENT, START IV
TRICYCLIC OVERDOSE
 SODIUM BICARB 100 mEq, IV, *1 mEq/kg, IV
 REPEAT SODIUM BICARB 50 mEq, * 0.5 mEq/kg, IV
CALCIUM CHANNEL BLOCKER OVERDOSE
 CALCIUM CHLORIDE 10% - 1 g SLOW IV
 * WITH ORDERS 0.2 ml/kg (20 mg/kg) max 500 mg
 GLUCAGON 1 mg IM OR IV

BETA BLOCKER OVERDOSE

GLUCAGON 1 mg IM OR IV
STIMULANT OVERDOSE
 IF CHEST PAIN
 NTG 0.4 mg SL IF SBP>100
 MIDAZOLAM 10 mg IN, 2 mg IV, 4 mg IM
 REPEAT MIDAZOLAM 5 mg IN, 2 mg IV, 4 mg IM

PULMONARY EDEMA

CPAP or {Bi-PAP} PRIOR TO DRUG THERAPY
 IF SBP >100, NTG 0.4 mg SL q 5 min x3

SEIZURES

MIDAZOLAM 10 mg IN, 2 mg IV, 4 mg IM
 repeat MIDAZOLAM 5 mg IN, 2 mg IV, 4 mg IM
 MIDAZOLAM 0.2 mg/kg IN or 0.1 mg/kg IV or 0.2 mg/kg IM
 REPEAT 0.2 mg/kg IN, 0.1 mg/kg IV, 0.2 mg/kg
 ALL PEDIATRIC MAX DOSES EQUAL ADULT MAX DOSES

SEPSIS

KNOWN or SUSPECTED INFECTION WITH:
 ETCO2 < 32 OR > 47 AND 2 OR MORE:
 RESP RATE ≥ 22
 ALTERED MENTAL STATUS (GCS < 13)
 TEMP >100.4 OR < 96.8
 HR > 90
 SBP < 100, or MAP ≤ 65 [MAP = (SBP+2xDBP)/3]
 1 L OF FLUID - MCP FOR ADDITIONAL FLUIDS
 OXYGEN
 NOREPINEPHRINE - 4 mg in 250 ml, 30 gtts/min

SHOCK - MANUAL BP AND CONSIDER ALL SIGNS

WITHOUT PULMONARY EDEMA
 500 ml NS - REPEAT X 1
 MCP FOR 3RD DOSE IN ADULTS
 NOREPINEPHRINE 30 gtts/min IF SBP < 100
 20 ml/kg NS
 MCP FOR 2ND DOSE IN PEDIATRICS
WITH PULMONARY EDEMA (JVD, RALES, EDEMA)
 250 ml NS
 NOREPINEPHRINE 30 gtts/min, IF SBP < 100
EXSANGUINATING HEMORRHAGE
 IV FLUID TO MAINTAIN SBP ~ 100
 20 ml/kg NS REPEAT X 2 FOR PERFUSION

SMOKE INHALATION/CYANIDE

100% O2 via NRB or BVM, CONSIDER CPAP (Bi-PAP)
NO DRUG ORDERS NEEDED IN CARDIAC ARREST
 IF CYANIDE ARRESTS, ACLS PRECEDES ANTIDOTES
 CYANOKIT 5 GRAMS (IV infusion over 15 min) MAY REPEAT
 SODIUM THIOSULFATE 50 ml (12.5 G) IV, > 25 kg
 PEDIATRIC WITH MCP
 CYANOKIT 70 mg/kg, max 5 g (IV infusion over 15 min)
 < 25 kg - SODIUM THIOSULFATE 1.65 ml/kg IV, max 12.5 g

STABLE TACHYCARDIA

NARROW COMPLEX - REGULAR
 VAGAL MANEUVERS/VAGAL MANEUVERS
 ADENOSINE 6 mg RAPID IV
 ADENOSINE 12 mg RAPID IV
 ADENOSINE 12 mg RAPID IV
WIDE COMPLEX - REGULAR OR IRREGULAR
 AMIODARONE 150 mg/250 ml NS OVER 10 min-60gtt tubing
 IF NO AMIODARONE, LIDOCAINE 150 mg IV/IO

STROKE

IF CEREBRAL HERNIATION - VENT AT 20 RPM (EtCO2=30)
 GLUCOSE < 60 OR SUSPECT, TREAT HYPOGLYCEMIA
 ONSET OF ONE OR MORE SIGN OF CIN STROKE SCALE
 AND < 24HRS TRANSPORT TO CLOSEST STROKE CENTER
 BED FLAT IF TOLERATE UNLESS INCREASED ICP

THE PEDIATRIC ASSESSMENT TRIANGLE

APPEARANCE, WORK OF BREATHING, CIRCULATION
 T TONE
 I INTERACTION
 C CONSOLABILITY
 L LOOK/GAZE
 S SPEECH/CRY

UNSTABLE TACHYCARDIA

CARDIOVERT 100, 200, 300, 360 J
 MIDAZOLAM 2 mg IV
VAGAL MANEUVERS
 ADENOSINE 0.1 mg/kg RAPID IV max 6 mg
 ADENOSINE 0.2 mg/kg RAPID IV max 12 mg
 ADENOSINE 0.2 mg/kg RAPID IV max 12 mg
 CARDIOVERT 1 J/kg THEN 2 J/kg
 MIDAZOLAM 0.1 mg/kg IV max 2 mg

V-TACH / V-FIB

INITIATE QUALITY CPR, 100-120 BPM
 DEFIB PER MANUFACTURER RECOMMENDATIONS
 DEFIB 2, 4, 6, 8, 10 J/kg
 RESUME CPR, NO PULSE CHECKS FOR 2 min
 ALTERNATE DEFIB/MEDICATIONS
 EPI 1 mg 1:10,000 IV/IO EVERY 3-5 min
 EPI 0.01 mg/kg (0.1 ml/kg): 1:10,000 IV/IO q 3-5 min
 AMIODARONE 300 mg IV/IO
 REPEAT IN 10 min 150 mg IV/IO
 AMIODARONE 5 mg/kg (50 mg/ml) IV/IO - max 300 mg
 REPEAT IN 10 min 5 mg/kg IV/IO - max 150 mg
IF NO AMIODARONE, LIDOCAINE 150 mg repeat 75 mg
IF NO AMIODARONE, LIDOCAINE 1.0 mg/kg (max 100/75)
 IF CONVERSION AND NO ANTI-ARRHYTHMIC
 AMIODARONE 150 mg/250 ml NS OVER 10 min-60gtt tubing
 IF SBP <90, 500 ml IV BOLUS to >90 SBP BEFORE AMIODARONE