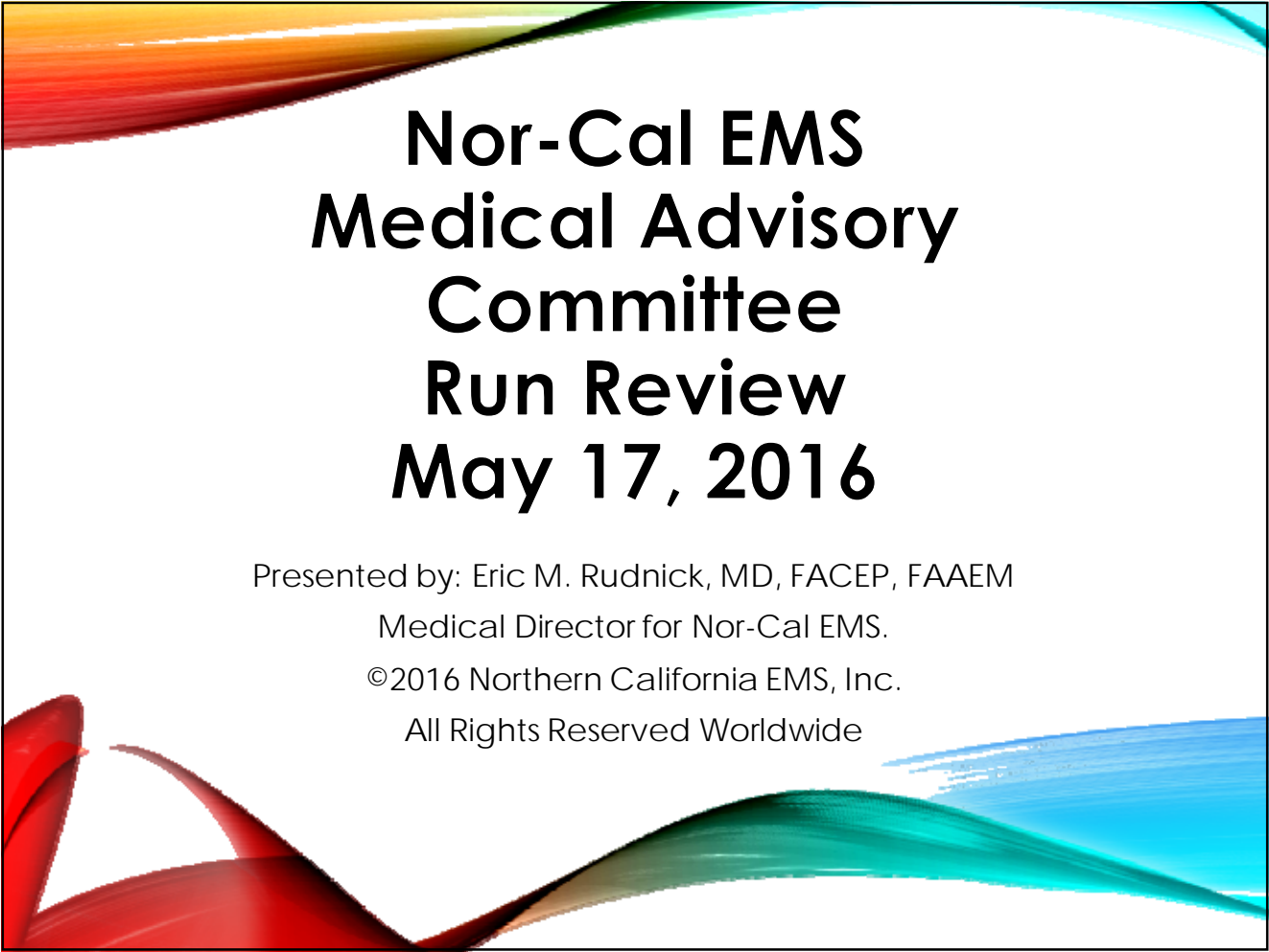


A Nor-Cal EMS WebCast for Continuing Education

Presented by Eric Rudnick, MD, FACEP,
FAAEM, Medical Director for Nor-Cal EMS.
Recorded Live on May 17, 2016
by Engineer Bill Bogenreif



Nor-Cal EMS Medical Advisory Committee Run Review May 17, 2016

Presented by: Eric M. Rudnick, MD, FACEP, FAAEM

Medical Director for Nor-Cal EMS.

©2016 Northern California EMS, Inc.

All Rights Reserved Worldwide



CASE #1

- HPI: Upon arrival, we found a 29 year-old male patient presenting with a chief complaint of code blue/hanging, which began: April 27,2016.
- First responder on scene was Fire FD and Law Enforcement.
- We were staged prior to being allowed at scene.
- History of event: Upon arrival found a 29 year-old male hanging from the inside his garage from a roof beam by a rope, unresponsive.
- Per law enforcement it was unknown down time, patient was asystole and no audible heart tones.

CASE #1

- There was no obvious signs of death so we cut the rope and laid the patient supine and began CPR with an OPA and BVM.
- While my partner and first responders were doing CPR and airway management.
- I started an IV and gave my first dose of EPI.
- After a few rounds of CPR the patient went into VFIB and was shocked at 150J.
- CPR was continued and the next rhythm check we had ROSC.



CASE #1

- Patient had massive amounts of chunky emesis in the airway that we suctioned frequently.
- Patient heart rate was starting to slow down and a dose of atropine was given, while preparing the patient for transport.
- With a backboard the patient had lost pulses and CPR was continued.
- Once we arrived in the back of the ambulance and secured an advanced airway the patient had gained ROSC again.
- We continued to tracheal suction when needed, and were able to get a blood pressure.

CASE #1

- Patient maintained ROSC, while we transfer care to Hospital ER staff.
- PMH: ?
- Current patient medications:?
- Allergies:?
- Provider impression: Trauma injury, cardiac arrest, monitoring required.

CASE #1

- Physical Assessment: All finding WNL except those checked below:
 - Head:
 - Neck:
 - Chest:
 - Abdomen:
 - Other abnormal findings: Circulation-body core was still warm to the touch.
- Back:
- Pelvis:
- Extremities:
- Neuro:

CASE #1

- Treatment/Medications:
- ALS Assessment: upon arrival found a 29 year-old male hanging from inside the garage roof beams with a rope around his neck, unresponsive.
- CPR, CPR started, after confirming no obvious signs of death.
- Manual cervical immobilization, throughout care of the patient we had manual immobilization of the head and neck
- ECG monitoring: patient was initially asystole on the monitor
- Pulse oximetry: unable to get an accurate pulse oximetry reading.

CASE #1

- Oxygen by BVM, chest compressions with BVM with OPA at a rate of 30-2
- Suction(oral): patient had massive mounts of vomit around the upper airway and needed to be suctioned multiple times.
- IV administered: normal saline 1000ml bag, size 20 guage.
- Site left AC
- Rate tko
- With no infiltration noted



CASE #1

- Drug administration EPI 1:10,000 no change
- Defibrillation, 150J
- End-Tidal CO2 monitoring
- Drug administration Atropine, patient remained heart rate increased and we sustained ROSC.
- CPR, patient had lost pulses and CPR was resumed
- Moved patient to gurney
- Patient placed on a back board and moved to the gurney.

CASE #1

- Moved to ambulance, patient was moved to the ambulance on the gurney with CPR in progress, by FD and EMS personnel.
- ET intubation
- Suction (tracheal), once the patient was intubated we used tracheal suction to help remove any vomit that he may have aspirated.
- Drugs administration: EPI 1:10,000, patient did convert back to ROSC after 2 minutes of CPR.
- Hospital contact- Base hospital contacted with updated patient condition and ETA.

CASE #1

- Cords visualized: yes
- Bougie device used: yes
- Number of attempts: 1
- ETT size: 7.5
- Tube depth: 22
- Placement: successful
- Location measured- lips
- Lungs sounds (L): yes
- Lungs sounds (R): yes



CASE #1

- Physician verifying placement – Dr. Djevalikian
- Patient moved to gurney by: carry on backboard.

CASE #1

- Initial Assessment
- Airway: partially obstructed
- Breathing: absent
- Circulation: Color Cyanotic, condition: dry, cap refill: none, Edema: none
- Pupils: unreactive
- Mental status: Unresponsive
- GCS: 3



CASE #1

- Dispatched 2227
- En route 2227
- On scene 2231
- Patient contact time 2232
- Left scene 2306
- At destination 2308
- 2236 HR 0
- 2247 RR 16



CASE #1

- 2249 BP 65/36
- 2251 HR 32
- 2252 CO2 12
- 2252 HR 85
- 2257 BP0 HR0
- 2301 HR 106
- 2302 CO2 63
- 2306 HR 107



CASE #1

- 2234 CPR
- 2235 OPA
- 2235 manual cervical spine
- 2236 oxygen 25 liters
- 2242 IV normal saline
- 2243 EPI 1:10,000
- 2245 Defibrillation
- 2248 Atropine



CASE #1

- 2249 CPR
- 2251 moved to ambulance
- 2253 ET placed
- 2254 trachea suctioned
- 2255 Epi 1:10,000
- 2304 hospital



CASE #1

- Documentation?
- Quality of care delivered?
- Other issues and concerns?
- Care appropriate?
- Overall impression?
- Protocol changes required?
- Teaching/Take home points

CASE #2

- Dispatched to stage for male GSW to abdomen.
- Responded code 3 from station.
- Arrived at staging area at 0406.
- Law enforcement cleared scene and advised to continue code 2 at 0417 hours.
- Due to nature of injury and location, next available air ambulance requested.
- First air provider declined and second provider launched delayed due to weather. Then cancelled by EMS due to stable vital signs.

CASE #2

- Upon arrival found patient inside residence laying supine on bed, alert, and tracking EMS with Fire and law enforcement in attendance.
- Approximately 1 liter blood loss noted throughout residence.
- Patient complaining of right index finger/hand pain secondary to gunshot, pain related 10/10 actively bleeding.
- Patient states that approximately 0300 hours an unknown subject entered residence and fired one shot from handgun striking patient in the right hand.
- Law enforcement relates that the bullet travel path into opposite wall past the patient with visible gunshot hole.

CASE #2

- Patient also relates an abdominal puncture wound/ approximately 1 cm in diameter/ bleeding controlled PTA with pain rated 3/10.
- Patient denies any LOC, SOB, or dizziness.
- On exam, patient is A+O x 4, GCS 15, pink, cold and dry with ABC's intact
- HEENT: clear/ speaking full sentences/symmetric facial tone, PERRL at 4 mm
- Neck: no JVD
- Chest: stable



CASE #2

- Lung sounds: C/E bilat/equal chest expansion
- Abdomen 1 cm puncture to right lower extremity abdomen traveling laterally/bleeding controlled PTA/non-tender to palpation/no distention, discoloration, or firmness noted
- Pelvis stable
- Lower extremities- stable and without complaint
- Upper extremities- right hand index finger- deformity at proximal metacarpal with visible muscle and bone on posterior portion/ patient unable to move finger with + circulation and sensation



CASE #2

- Back stable and clear without complaint
- CSM intact X 4, remainder of exam is unremarkable

CASE #2

- Right index finger wound dressed with 2x2 gauze and roller gauze/ bleeding controlled
- Abdomen wound dressed with abdomen pad gauze and tape with bleeding controlled.
- Lifted to gurney then LSU, code 2, to trauma center.
- En route: V/S acquired and monitored throughout.
- Tx: 3 lead ECG, NSR at 68 bpm/intermittent PVC's
- Oxygen at 2 lpm via NC
- IV NS lock 18g left AC

CASE #2

- NS fluid bolus 500ml
- Report called to trauma center with orders to administer 25 to 50 mcg Fentanyl per doctor.
- Order repeated and confirmed 0552.
- Administered 25 mcg Fentanyl IVP.
- Pain scale reduced to 9/10.
- Patient began to c/o nausea during tx.
- Administered Zofran 4 mg SIVP.
- Fentanyl 25 mcg reducing pain scale 8/10.



CASE #2

- No further changes in patient condition during transport.
- Tx of patient turned over to doctor at trauma center.



CASE #2

- Medications: Metoprolol, Simvastatin, ASA
- Allergies to medications: codeine, Lasix
- PMH: HTN, MI, Hypercholesterolemia, Suprapubic hernia

CASE #2

- 0426 Mental status: O_x4
- Neuro: normal
- Skin: cold, cap refill less than 2 seconds
- 0427: 197/168 HR 61 RR16 SaO₂ 98% negative stroke scale (done three times)
- 0436: 151/96 HR 68 RR 16
- 0441: 156/86 HR 63 RR 16
- 0456: 165/129 HR 78 RR 16
- 0513: 167/102 HR 65 RR 16
- 0526: 161/ 102 HR 65 RR 16

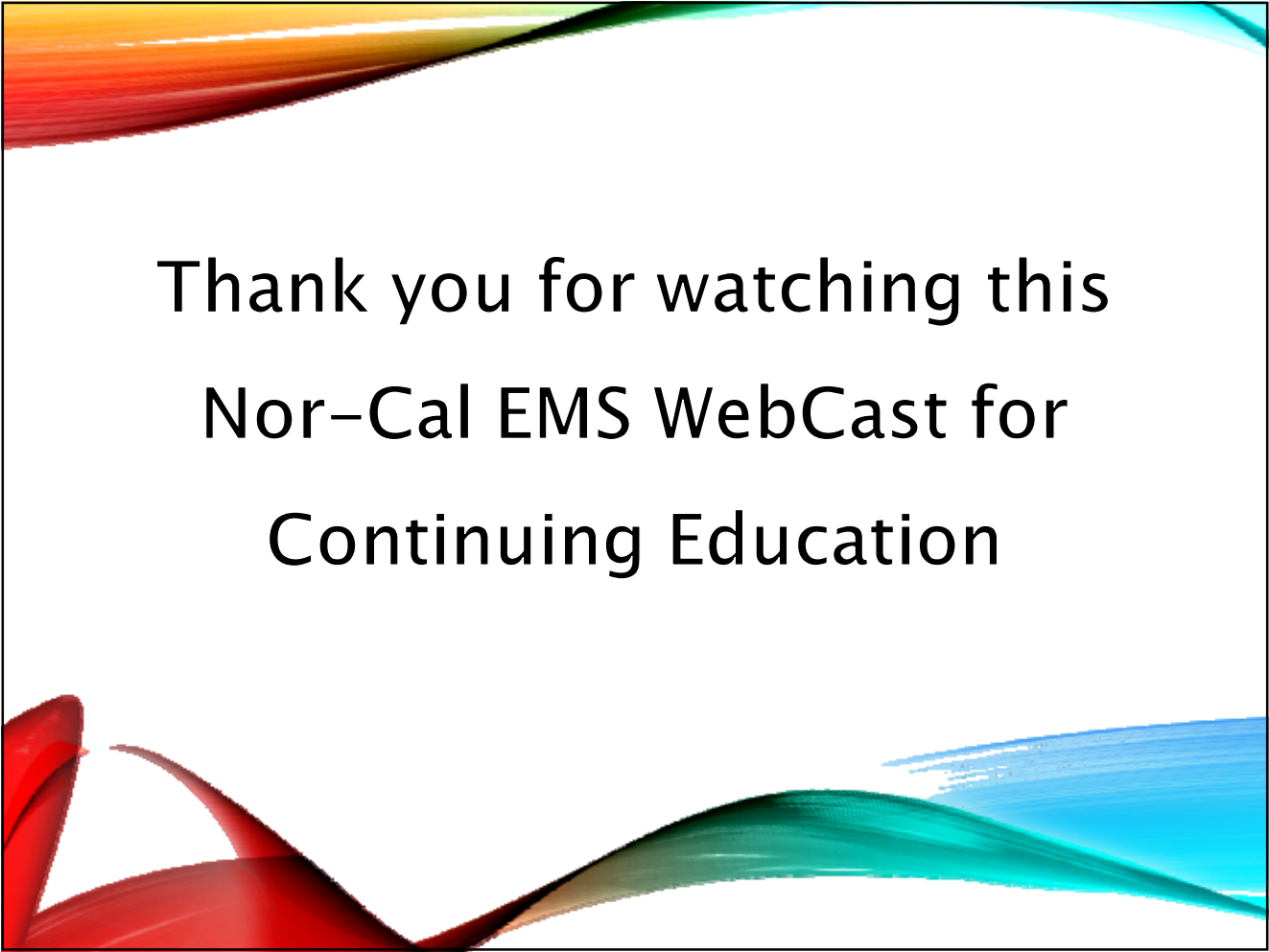
CASE #2

- 0541: 159/99 HR 69 RR 16
- 0556 154/97 HR 66 RR 16
- 0621 142/89 HR 71 RR 16
- 0626 144/86 HR 65 RR 16
- 0516: monitor NST with PVCs
- 0447 IV access
- Patient turned over to RN and MD



CASE #2

- Documentation?
- Quality of care delivered?
- Other issues and concerns?
- Care appropriate?
- Overall impression?
- Protocol changes required?
- Teaching/Take home points



Thank you for watching this
Nor-Cal EMS WebCast for
Continuing Education