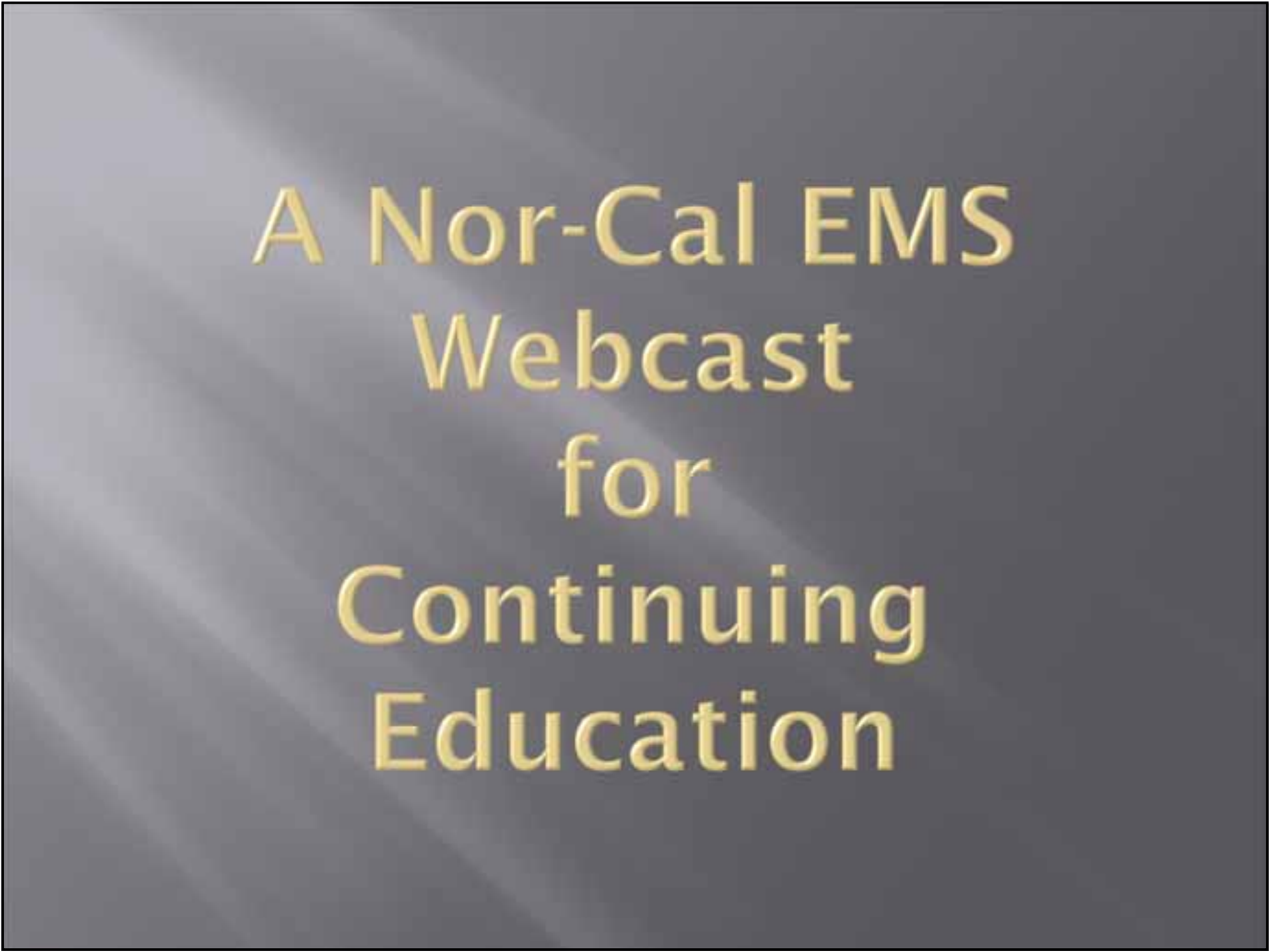


A Nor-Cal EMS Webcast
Nor-Cal EMS Medical Advisory Committee
Run Review July 2015

©2015 Northern California EMS, Inc.
All Rights Reserved Worldwide.



A Nor-Cal EMS Webcast for Continuing Education

Presented by Eric Rudnick, MD, FACEP,
FAAEM, Medical Director for Nor-Cal EMS.
Recorded Live on July 7th, 2015
by Engineer Bill Bogenreif

Nor-Cal EMS
Medical Advisory Committee
Run Review
July 7th, 2015

Presented by:
Eric Rudnic, MD, FACEP, FAAEM
Medical Director for Nor-Cal EMS

©Northern California EMS, Inc.
All Right Reserved Worldwide

Case #1

- ▣ Chief Complaint: Chest pain in a 62 year old male.
- ▣ Dispatched code 3 for chest pain at an urgent care secondary to a motorcycle accident earlier in the day.
- ▣ Arrived to find 62 year old male sitting in the clinic lobby with complaint of chest pain and minor bleeding from forehead above left eye.
- ▣ Patient was riding ATV approximately 20 mph when he was ejected and then run over by the empty trailer that the ATV was towing.
- ▣ Patient states that this happened at approximately 1300 today.
- ▣ No medical history, NKDA, and denies currently taking any medications.

Case #1

- ▣ ABC's intact, GCS 15, skin pink, warm and dry
- ▣ Lungs sounds clear
- ▣ Patient denies any loss of consciousness, negative for headache
- ▣ Negative for dizziness, pupils round and equal in size and reactive to light
- ▣ Swelling to forehead above left eye with laceration that has minor bleeding controlled with application of 4X4
- ▣ Pain on palpation to neck, no bleeding, no deformity, no bruising,
- ▣ Negative back pain upon palpation

Case #1

- ▣ No obvious signs of trauma noted in back or spine
- ▣ Chest pain on palpation, chest is stable with equal rise and fall, no obvious signs of trauma to anterior chest, large abrasion to right flank with no current bleeding
- ▣ Negative abdominal pain on palpation
- ▣ Temperature normal
- ▣ No obvious signs of trauma noted to rest of abdomen
- ▣ Pelvis stable, femurs stable
- ▣ Laceration with soft tissue protruding from right inner biceps with minor bleeding controlled with application of 4X4 and Kerlix wrap

Case #1

- ▣ CSM X 4, No obvious signs of trauma to right lower arm, or left lower arm, or to lower extremities

Case #1

- ▣ While on scene, Patient placed in full spinal immobilization with rigid collar, patient placed on rigid backboard, head immobilized with blocks and patient secured to backboard
- ▣ Phone call to base for trauma activation
- ▣ Transported code 3 to base hospital
- ▣ Enroute patient placed on oxygen via nasal cannula at 4 LPM
- ▣ Raised pulse oximetry from 94% to 100%
- ▣ Cardiac monitor shows sinus rhythm, 20 gauge IV unsuccessful left arm since vein blew, BG checked from obtained from IV catheter

Case #1

- ▣ 18 gauge IV unsuccessful, patient update given to hospital and advised not to continue to try IV
- ▣ Arrived to destination with patient stating decrease in chest pain and now only complained of pain to head
- ▣ Report to trauma physician and patient care transferred.

Case #1

- ▣ 13:33 Physical Examination
- ▣ Mental status: normal status for patient, oriented to person, oriented to place, oriented to events
- ▣ Neurologic: normal
- ▣ Eyes: reactive bilaterally
- ▣ Skin: normal
- ▣ Head/Face: swelling/edema, pain/tenderness, laceration, swelling to forehead above left eye with laceration with minor bleeding

Case #1

- ▣ Neck: pain/tenderness, no JVD, Trachea midline, tenderness on palpation to back of neck
- ▣ Chest/lungs: normal. Clear and equal breath sounds, tenderness to left, tenderness right, pain non-radiating, clear breath sounds left, clear breath sounds right, Upper chest tenderness on palpation, non radiation, negative bruising, negative deformity
- ▣ Heart: normal
- ▣ LUQ: normal, soft, non-tender, LLQ: normal, soft, non-tender,
- ▣ RUQ: normal, soft, non-tender, RLQ: normal, soft, non-tender
- ▣ GU: normal

Case #1

- ▣ Cervical: normal, Thoracic: normal, Lumbar: normal
- ▣ Extremities Upper right: pain/tenderness, + CSM, laceration to inner right biceps area with minor bleeding and tissue protruding
- ▣ Upper L: normal
- ▣ Lower right: normal
- ▣ Lower left: normal

Case #1

- ▣ 13:44 BP 191/77, HR 73, RR 14 SpO2 94%, GCS 15, Pain 3
- ▣ 13:47 BP 194/75, HR 74, RR 14, SpO2 95%
- ▣ 13:51 BG 134
- ▣ 14:02 BP 157/117 HR 82, RR 14
- ▣ Monitor: NSR
- ▣ 13:33 spinal immobilization
- ▣ 13:34 bleeding/hemorrhage control
- ▣ 13:50 to 1400 attempts X 5 IV unsuccessful
- ▣ 13:49 oxygen via nasal prongs 4 LPM

Case #1

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

Case #2

- ❑ Chief complaint: Cardiac Arrest
- ❑ Dispatched for patient with N/V
- ❑ Arrived at scene to find patient sitting on the toilet with his wife holding him up.
- ❑ Patient was pulses and apneic
- ❑ LSU crew carried patient out to the front room and started CPR
- ❑ Patient's wife reported that the patient had been vomiting a black colored fluid for the past 24 hours and he did not want to go to the hospital, over the 24 hours got weaker and weaker

Case #2

- ▣ Patient's wife reported that she kept trying to get him to go to the hospital but he would not, today became so weak could not stand on his own
- ▣ Patient's wife reported that patient started to lose weight about one year ago for unknown reason
- ▣ In December 2014 he went to the hospital and was Dx with a unknown mass on his pancreas, patient signed out AMA before any further assessment or TX.
- ▣ Since December patient has been in and out of the hospital multiple times for his weight loss, N/V, and weakness

Case #2

- ▣ The mass was biopsied with no results yet.
- ▣ Patient was scheduled for physician appointment tomorrow at UC Davis for further assessment of the mass.
- ▣ Patient's wife reported that did not know if patient had a DNR in place. She tried multiple conversations on multiple times with the patient about his medical condition and he would not talk to her about it.
- ▣ Patient's wife reported that she had a feeling the patient was going to eventually die from his medical condition because it was very hard for her to get him to seek treatment.

Case #2

- ❑ Patient's wife reported just before 911 was called today she was trying to get him off the toilet, he was too weak to do it himself and she was unable to get him up herself.
- ❑ So she had her sister call 911.
- ❑ While her sister was calling 911 the patient became unresponsive, she tried to shake him to wake him up, he would not wake up and then she noticed him not breathing.
- ❑ AX: Patient was clothed sitting on the toilet with the lid closed.
- ❑ Patient was moved to the floor.

Case #2

- ▣ Patient was pulses and apneic.
- ▣ Skin was pale.
- ▣ Extremities were cold and body core was warm.
- ▣ Patient was extremely emaciated with severe muscle atrophy.
- ▣ Pupils were fixed and dilated at 6mm
- ▣ The skin of the patient's fingers were black.
- ▣ ALS TX was initiated on patient.

Case #2

- ▣ TX as noted.
- ▣ Some TX delayed due to only two personnel at scene, no further TX providers at scene.
- ▣ MICP performed CPR.
- ▣ While CPR was performed patient was have copious amounts of black fluid fill mouth.
- ▣ Patient was suctioned multiple times during CPR to keep airway patent.

Case #2

- ▣ On unsuccessful IV attempts, IV flash was obtained and catheter was inserted into vein. As IV was flushed the vein would rupture at the tip of the catheter above the needle site.
- ▣ A patent IO was established and would flush with 20ml syringe but the IV bag would not run freely, IV was established.
- ▣ After second epinephrine patient converted into Vfib then went back to asystole for 2 seconds (measured on strip).
- ▣ Called hospital, physician concurred with treatment and gave orders to stop resuscitation efforts.

Case #2

- ❑ Patient was pronounced by DR.X at 1432 hours.
- ❑ Patient's wife was notified and concurred with patient care decision.
- ❑ Patient's wife reported that she is glad patient is dead and not suffering anymore.

Case #2

- ▣ 13:55 Head/Face: normal, Neck: normal, Chest/Lungs: normal chest assessment, clear and equal breath sounds
- ▣ Heart: normal, not done
- ▣ LUQ, RUQ, LLQ, RLQ: normal, soft, non-tender
- ▣ GU: normal
- ▣ Cervical, Thoracic, Lumbar: normal, no pain or deformities
- ▣ Extremities: normal
- ▣ Mental status: unresponsive, Neuro: not done
- ▣ Eyes: fixed/ non-reactive
- ▣ Skin: cold pale, dry, poor turgor

Case #2

- ▣ 13:58 Asystole
- ▣ 13:58 CPR
- ▣ 13:59 Airway suctioning
- ▣ 14:02 Venous access extremity
- ▣ 14:04 Venous access extremity
- ▣ 14:07 Venous access extremity
- ▣ 14:10 Intraosseous
- ▣ 14:12 epinephrine 1mg

Case #2

- ▣ 14:15 Venous access
- ▣ 14:17 epinephrine 1 mg
- ▣ 14:20 Blood glucose 102
- ▣ 14:22 Epinephrine q mg
- ▣ 14:27 Defib manual
- ▣ 14:28 epinephrine 1 mg

Case #2

- ▣ Dispatch notified 13:46
- ▣ Unit dispatched 13:48
- ▣ En route 13:50
- ▣ At scene 13:54
- ▣ At patient 13:55
- ▣ First CPR 13:58
- ▣ First Defib 14:22
- ▣ CPR discontinued 14:32

Case #2

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

Case #3

- ▣ Dispatched code 3 for possible stroke.
- ▣ Arrived to find 67 year old male sitting on toilet in bathroom complaining of feeling weak and dizzy.
- ▣ Patient states he was using the bathroom when he passed out.
- ▣ Patient says he woke up partially in his bathtub which is next to the toilet.
- ▣ Patient states he has also been feeling nauseated today and has vomited once.
- ▣ Patient denies blood in vomit.
- ▣ History of diabetes and bradycardia.

Case #3

- ▣ Airway clear and open
- ▣ Breathing is non-labored with equal rise and fall
- ▣ Pulse is 45, GCS 15
- ▣ Lung sounds clear in all
- ▣ Skin pale, warm, and dry
- ▣ Patient states he feels dizzy which gets worse when standing, nauseated, and feels nauseated and feels weak on his feet.
- ▣ Negative abdominal pain, SOB, chest pain,
- ▣ Equal grip strength, negative facial droop and clear speech

Case #3

- ▣ While on scene patient placed on oxygen via nasal cannula at 4 LPM which raised pulse oximetry from 94% to 98%.
- ▣ Patient lifted to gurney, placed in position of comfort and transported code 2 to hospital.
- ▣ En route to hospital cardiac monitor shows sinus bradycardia, 12 lead shows sinus bradycardia.
- ▣ 20 gauge IV established in left AC with normal saline at rate of TKO.
- ▣ BG check obtained via IV catheter .
- ▣ Phone report to hospital with no further orders.

Case #3

- ▣ Arrived to destination with no further changes in patient condition.
- ▣ NKDA
- ▣ Medications: Lantus, Novolog, mometasone, formoterol, albuterol, ipratropium, gabapentin, metoprolol, Lisinopril, simvastatin, temezapam, warfarin, amlodipine, HCTZ, vitamin B12, Spiriva, hydralazine

Case #3

- ▣ 14:29 physical examination
- ▣ Mental status: normal for patient, oriented person, oriented place, oriented event
- ▣ Neuro: normal
- ▣ Eyes: reactive
- ▣ Skin: pale, warm, dry
- ▣ Head/Face: normal
- ▣ Neck: normal
- ▣ Chest/Lungs: normal assessment, normal, clear and equal breath sounds

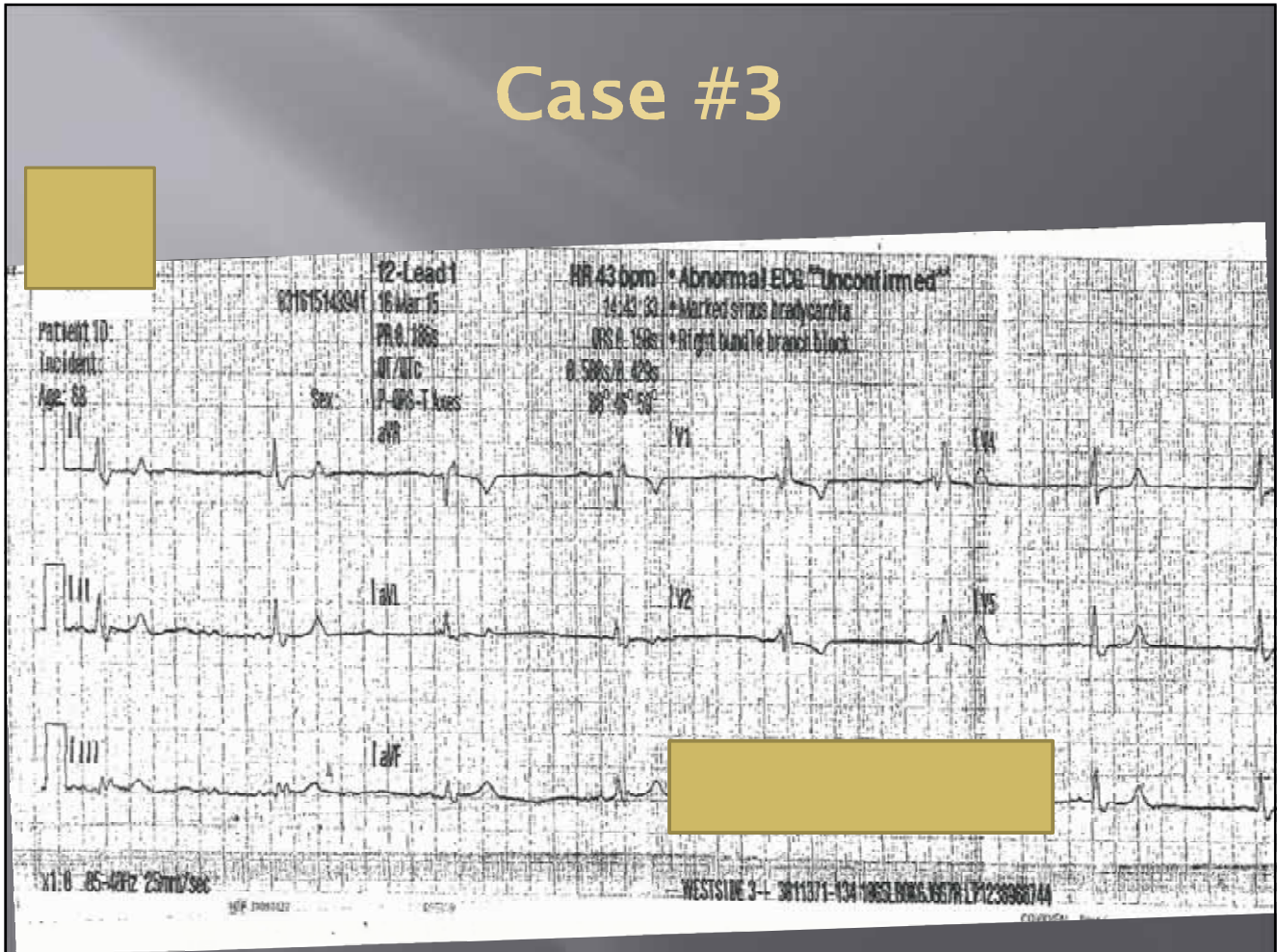
Case #3

- ▣ Heart: normal
- ▣ LUQ/LLQ/RUQ/RLQ: normal, soft, non-tender
- ▣ Cervical/Thoracic/Lumbar: normal, no pain or deformities
- ▣ Extremities: upper right, upper left, normal, lower left and lower right weakness

Case #3

- ▣ 14:33 BP 98/38, HR 46, RR 14, SpO2 94% GCS 15
- ▣ 14:41 BP 108/30, HR 45, RR 14
- ▣ 14:44 BP 116/34, HR 44, RR 14
- ▣ 14:47 BG 241
- ▣ 14:41 monitor: sinus bradycardia
- ▣ 14:43 12 lead: sinus bradycardia
- ▣ 14:46 venous extremity
- ▣ 14:34 oxygen

Case #3



Presented by Eric Rudnick, MD, FACEP,
FAAEM, Medical Director for Nor-Cal EMS.
Recorded Live on July 7th, 2015
by Engineer Bill Bogenreif

Case #3

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

