

Nor-Cal EMS Medical Advisory Committee Run Review September 2014

Eric M. Rudnick, MD, FACEP, FAAEM
Medical Director
Northern California EMS

Case #1

- Dispatched for a male with chest pain
- 41 year old male with a history of WPW as a teen
- Always has had a “racing heart”
- Takes no medications to slow his heart down
- Uses breathing techniques to slow the rate
- Drinking tonight and had “8 to 10 beers”
- Had palpitations and chest pain for approximately 1 hour prior to his wife calling 911

Case #1

- Time 22:50
- Patient is pale and clammy
- HR 125 RR16 Pain 8 out of 10
- Cardiac monitor initial pulse 125 and irregular

Case #1

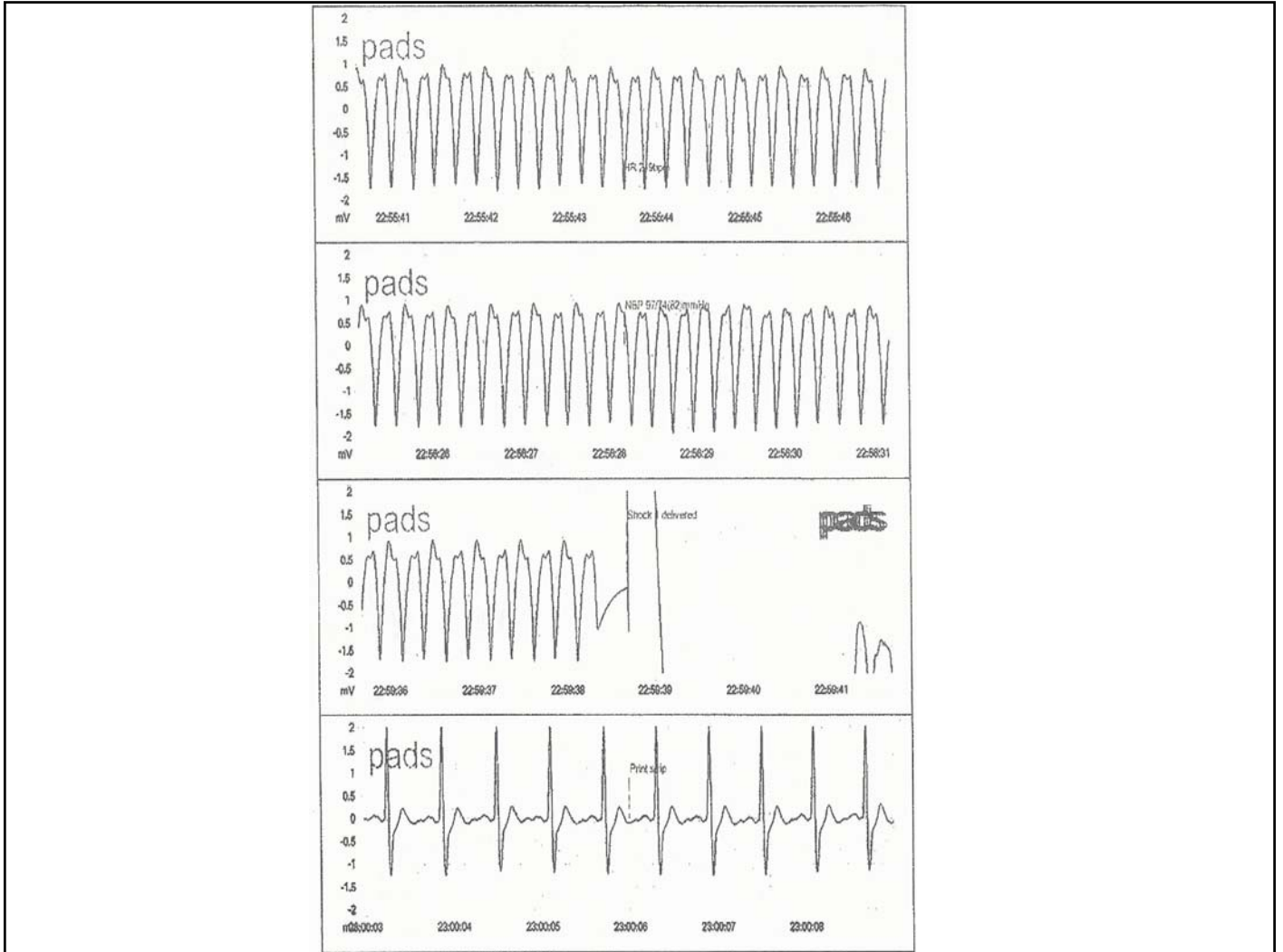
- Time 22:50
- On monitor rate changed almost immediately to 250 and showed Ventricular Tachycardia
- Blood pressure 94/75 RR 20 SpO2 89%
- Chest hurts more and increased shortness of breath
- No other assessments performed at this time

Case #1

- Time 22:54
- Blood pressure 98/75 HR 244 RR 20 SaO2 98 low oxygen
- 22:58 IV access

Case #1

- Placed on pads and moved to gurney, then immediately to back of ambulance
- 22:56 Versed 2 mg given IVP
- 22:59 patient shocked with 100 J synchronized cardioversion
- Heart rate dropped to below 100
- Patient reports feeling better



Case #1 Review

- Care appropriate?
- What went well?
- What could have been improved?
- Recommended changes to protocols?

Case #2

- PSAP 17:22
- Enroute 17:23
- At patient: 17:30
- Depart: 17:46
- Arrive Dest: 17:53
- Chief complaint: Difficulty breathing
- Primary symptom : Breathing problem Other Associated: N/V

Case #2

- NKDA
- Medications: Synthroid, Tenormin, Zocor, Zoloft, Celexa, Tylenol, Ativan
- PMH: Aortic stenosis, Dementia

Case #2

- 17:45 Blood pressure 207/107, HR 140, RR 28 SpO2 100%
- Neuro not available; dysphagia
- Lungs: normal chest assessment, clear and equal
- Abdomen: normal
- Time last scene normal: 17:15
- Speech: normal
- Facial droop: normal
- Arm drift: normal

Case #2

- 17:42 ECG: afibrillation
- 15:51 Venous access saline lock:
- 17:52 Blood glucose analysis: 177
- Time unknown: Oxygen

Case #2

- Arrived on scene at SNF to find 95 year old female sitting on a chair with high flow O2, A&O x2 with pale, cool skin and speaking 1 to 2 word sentences.
- Patient c/o difficulty breathing, dysphagia, nausea, and H/A post choking episode while eating dinner 17:15 tonight.
- Staff stated that the patient began choking, then patient went unconscious the staff started the Heimlich maneuver.
- Patient then became more alert but remained altered per staff.

Case #2

- Upon EMS arrival patient stated that she was having a hard time swallowing and that she had a H/A.
- Patient denied all other complaints and symptoms including CP, abdominal pain, dizziness, vomiting, diarrhea, fever or other recent illness.
- Staff stated she was last seen normal at 17:15.
- Staff were unable to provide accurate medical history.
- Patient was then transferred to gurney, placed in Fowler's position and transported.

Case #2

- Patient transported code 3 to facility Stroke Alert.
- Secondary assessment was unremarkable.
- During transport 12 lead EKG was performed reading atrial fibrillation with no ectopy. During transport patient began episodes of dry heaving with increased nausea.

Case #2

- Care appropriate?
- What went well?
- What could have been improved?
- Recommended changes to protocols?

Case #3

- Code 3 for a patient complaining of chest pain with shortness of breath
- Fire greets EMS outside and reports the following:
- The patient was eating lunch at the table at 0930 this morning when he began to experience chest pain
- Pain increased to the point when he called 911
- History of heart attack 7 months earlier and had pacemaker placed
- Recently take off hospice and has a “DNR”
- Fire placed the patient on supplemental oxygen

Case #3

- Fire in addition, helped patient with one of his own NTG with a decrease of the chest pain from a “5” down to a “4”
- Fire reports that the patient’s blood pressure went from 124/78 to systolic of 100
- Family reports that they want assist ventilations if the patient stops breathing but not chest compressions and medications
- Patient understand some English but does not speak it

Case #3

- Patient alert to name, place, time, and events
- Airway intact
- Skin is normal in color, warm to touch, and dry
- No facial droop or slurred words
- Chest: non-radiating left sided chest pain
- “someone punched me in the chest”
- Some difficulty in breathing
- Lungs clear and equal bilaterally

Case #3

- Patient reports that the pain worsens with inspiration and palpation
- Abdomen soft and non-tender
- Extremities: radial pulses are present

Case #3

- Patient placed on cardiac monitor
- 12LEad was obtained, noted, and transmitted
- Taken off of non-rebreather and subsequently placed on nasal cannula
- Patient assisted to walk 4 steps to stretcher
- In established and NTG given as well as ASA
- Chest pain went down to “3”
- No changes noted during code 2 transport to hospital

Case #3

- Allergies: codeine
- Medications: Nitrostat, ASA, Plavix, Iron, Midrone, Atorvastatin, Motrin
- History from family

Case #3

- Vital signs
- 11:06 133/57, HR89, RR 20
- Stroke scale negative
- 11:21 124/61, HR 105, RR 18
- 11:37 113/58, HR 104, RR 18
- Monitor: sinus tachycardia
- 12 lead: sinus tachycardia

Case # 3

- Medications
- 11:04 Oxygen, improved
- 11:16 NTG, improved
- 11:21 ASA, improved

Case # 3

- Care appropriate?
- What went well?
- What could have been improved?
- Recommended changes to protocols?

Case #4

- Dispatched code 3 to an allergic reaction
- Arrived to find a 89 year old female pink, warm, and dry
- Complains of being stung by a wasp while refilling her hummingbird feeder
- Patient reports being stung to the back of her right hand 15 to 20 minutes ago
- Patient states that she took 2 25mg Benadryl immediately after being stung

Case #4

- Patient denies feeling SOB, c/p, itching or dizziness
- Patient did complain of a “funny feeling” to the back of her throat and tingling to her hands
- This is similar to the prior allergic reaction
- Has allergy to bee stings
- Past Medical History: HTN and Afib

Case #4

- No apparent angioedema or stridor
- Patient is Pink, Warm, and Dry
- Lung sounds clear in all fields
- Positive orthostatic changes, supine BP 92/53, HR 68, Sitting BP 64/39, HR 75 with onset of dizziness
- Dizziness improved lying back down
- Patient assisted with 2 person to stretcher

Case #4

- Oxygen via nasal cannula and transported code 2 to ED
- Monitor shows afib
- IV established and run wide open, total bolus 650 ml with continuous reassessment of lung sounds
- Benadryl 50 mg IV
- With relief of the “funny feeling” in the throat

Case #4

- NKDA
- Medications: Azor, Lasix, Warfarin
- PMH: HTN, Afib

Case #4

- 16:06 BP 92/53, HR 68, RR 16 SpO2 91% room air
- 16:10 BP 64/39, HR 75, RR 16
- 16:20 BP 78/42, HR 68, RR 16
- 16:30 BP 86/54, HR 62, RR 16
- 16:34 BP 98/64, HR 58, RR 16
- 16:40 BP 108/58, HR 63, RR 16 Spo2 98 low flow
O2

Case #4

- 16:03 Adult assessment
- 16:14 Oxygen by nasal cannula
- 16:15 venous access
- 16:16 Blood glucose 132
- 16:16 Normal Saline increments 250 ml to total 650 ml
- 16:32 Benadryl 50 mg IV

Case #4

- Care appropriate?
- What went well?
- What could have been improved?
- Recommended changes to protocols?

Case #5

- Arrived on scene to find 69 year old, alert, oriented X 4
- Patient increasing weakness throughout the week
- History of narcotic abuse and trying to detox off of methadone and oxycontin
- Slightly diaphoretic and becomes dizzy and unsteady when she tries to stand or exert herself
- Hard time keeping liquids down
- Has had N/V/D last two days

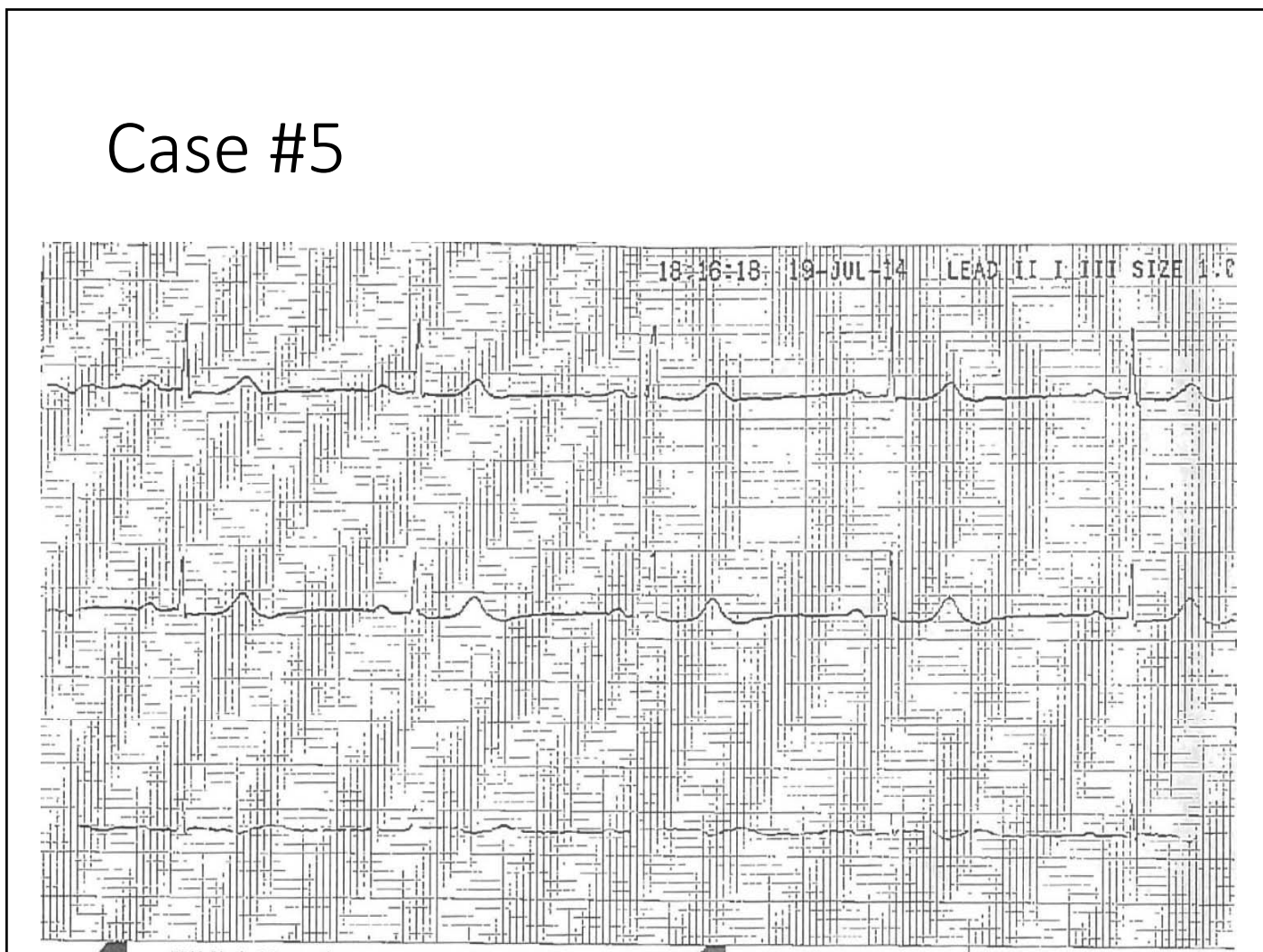
Case #5

- Placed on monitor and rhythm at 35 to 40 and does not remember any episodes of bradycardia in the past
- Placed on O2, IV established
- Treated with Versed and paced at a rate of 70

Case #5

- 18:05 BP 138/84, HR 40, RR 18 SpO2 90
- 18:05 Narcan 0.4 mg, IV
- 18:06 Oxygen by nasal cannula 4 lpm
- 18:12 BP 136/81, HR 74, RR 16 SpO2 98 on oxygen
- 18:13 IV established
- 18:16 12 lead EKG
- 18:20 Versed 2 mg
- 18:22 pacing started

Case #5



Case #5

- Care appropriate?
- What went well?
- What could have been improved?
- Recommended changes to protocols?