



EMS NEWS

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More Than Just A Fall

Dennis Edgerly, EMT-P Education Coordinator HealthONE

It's 45 minutes before shift change. It's been a long night, and before your relief arrives, your ambulance is dispatched to the report of an elderly fall patient. You and your partner release a collective sigh as you move to the ambulance and acknowledge the call and announce your response. When you arrive on scene, you're met by a woman in her late 50s telling you she found her 73-year-old mother lying on the floor this morning, unable to get up. The daughter states that she spoke with her mother two evenings ago to confirm their breakfast plans for this morning and everything sounded fine.

The patient is awake and breathing and responds to your questions, but she's lethargic and confused about the time of day and recent events, which the daughter adds is abnormal behavior. She's dressed in a nightgown and tells you she hurts everywhere and wants to get into bed.

It's important for providers to remember that what may appear to be a simple fall has many other factors that should be considered.

Assessing Geriatric Falls

Falls in geriatric patients can result in traumatic injuries that are not commonly seen when a younger person falls such as hip fractures and pelvic fractures. Fractured ribs may cause damage to the lungs and the liver, so they must be considered as well. After evaluating and correcting problems with vital function, such as breathing and circulatory status, you need to consider underlying causes and associated events. When a patient is found on the ground, EMS providers must ask themselves: How did the patient get there?



Causes of falls in geriatric patients can be simplified into two primary categories: trip and fall or pass out and fall. These two mechanisms have different implications. When evaluating a trip and fall, EMS providers should focus on the injuries the trauma of the fall may have caused. In the case of a pass out and fall or syncope, EMS providers must consider the possible medical causes in addition to the traumatic injuries resulting from the fall.

Common causes of syncope include strokes or transient ischemic attacks, hypoperfusion to include slow hemorrhage and dehydration, medication side effects or interactions and cardiac dysrhythmias, such as new onset atrial fibrillation and high-degree heart blocks. If the patient is having or has had a

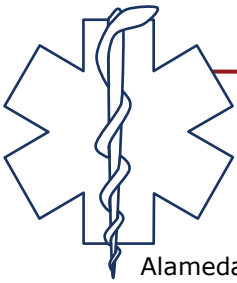
stroke or heart attack, the EMS provider on scene must consider the implications of treating the underlying cause and the potential effects that treatment will have on any new injuries the fall causes. For example, a patient experiencing a heart attack would benefit from aspirin and nitroglycerin, but if the fall caused an injury that was bleeding substantially, both of these treatments would be contraindicated.

The next factor that must be considered is time (i.e., how long the patient has been on the ground.) Time affects many things. Geriatric patients commonly have difficulty regulating body temperature, and lying

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Alameda County “EMS Corps”

A captivating opportunity for young at-risk males

Alameda County Health Pipeline Partnership is proud to announce the **EMS Corps**, a project partnership between Alameda County Health Care Services Agency and BAY-EMT. This 6-12 month, fulltime, paid, life coaching experience is designed to give young, at-risk, minority males between the ages of 18-24 currently living in the urban county, an opportunity to pursue a career in the healthcare field as an EMT, paramedic or firefighter.

The county’s EMS Corps program design is modeled after a very successful two year interdepartmental project between the county’s Public Health EMS Division and the Probation Department, which introduces juvenile offenders between the ages of 15-18 to EMT health career opportunities. This program provides them with First Responder training so they can be helpful at home, in school and in the community when medical emergencies arise.

Alameda County Health Pipeline Partnership (ACHPP) in joint partnership with EMS Corps has a new and expanded focus, which targets a broader age range of urban male youths ages 18-24. Added supports in this program include tutoring, case management, profes-

sional mentorship opportunities and community health service internships. All of the health career training and personal support activities are designed to create an internal and external “synergy” that is positive, progressive and productive. By undertaking the process of “knowing, growing and doing”, young men are able to transform their lives through internal change, academic achievement, economic advancement and community engagement. The purpose of the EMS Corps initiative is inline with ACHPP’s mission statement which states “to provide a diverse group of Alameda County youth with a supportive network of academic, social and professional development to build a successful career in the health industry.”

The primary benefit of the EMS Corps model is its direct pathway to personal empowerment and economic self-sufficiency through employment. Moreover, as youth become more hopeful about their future and are employed, they generate revenue, pay taxes and become engaged citizens. The model is also cost effective because it reduces juvenile recidivism, thereby lowering net county costs related to housing youth in juvenile facilities.

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Not Just A Fall *(Continued from page 1)*

on the floor for any amount of time won’t help. It’s key to remember that conduction is the exchange of heat between two objects in contact with each other. In other words, being in constant contact with an object that’s cooler than a patient’s body temperature, such as a floor, will begin to drop body temperature. Hypothermia must be considered in patients who’ve been on the floor for a prolonged time. Hypothermia can cause an alteration in mentation and can adversely affect the body’s ability to clot if a patient is bleeding.

EMS providers know from experience that many geriatric patients take several drugs a day to treat a variety of chronic illnesses. If a patient has been on the floor for a prolonged period of time, there’s a good chance they haven’t taken their prescription medications. Non-compliance with medications, even for a short period of time, can result in exacerbation or worsening of medical conditions: blood glucose levels can rise or drop, blood pressure can increase causing stroke, and patients with heart failure can have an increase of pulmonary edema, resulting in hypoxia. All these conditions can alter mental status.

When tissue is compressed for a prolonged period of time, damage to the superficial tissue in the form of ulcerations and skin tears can occur. The underlying muscles can be affected too, and such conditions as compartment syndrome can occur. A sign of compartment syndrome includes pain out of proportion to injury. So if your patient is complaining of horrible pain, but you don’t see signs of obvious injuries, consider compartment syndrome.

Conclusion

When you see a geriatric patient lying on the floor, consider underlying complications. In some instances, the call is as easy as helping someone back to bed. In other cases, it can be much more complicated. Always consider potential underlying causes. Never accept a new presentation of altered lea geriatric patient as OK because the patient is “old.” And, don’t be too quick to rule out geriatric abuse. Thorough assessment of the patient, scene and situation allows for complete treatment and helps prevent negative outcomes.

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EMS Recognition Luncheon



The 2011 EMS Week Awards luncheon was held at the beautiful Sequoya Country Club in Oakland on May 18. Dr. Jocelyn Freeman-Garrick, the EMS Assistant Medical Director served as the Mistress of Ceremonies. Dr. Carter Clements of Highland Hospital was the keynote speaker. The posting of the colors was done by the Honor Guards of Alameda County Fire Department and American Medical Response. We honored our providers, who are instrumental to the success of our EMS system, and presented awards to those who have been chosen as having performed above and beyond the call of duty.



2011 Memorial

Fire Captain Scott Carnevale, of Alameda City Fire since 1997 and EMT Sanjay Singh of AMR were remembered with a tribute and a moment of silence. We also remembered paramedic Bryan Stow, a victim of violence at a LA Dodgers and San Francisco Giants baseball game, with a moment of silence.

Star of Life Award

Patrick Lickiss, CES Coordinator/Paramedic of American Medical Response, was given the Star of Life Award which reads: "Alameda County EMS recognizes Patrick Lickiss for his exemplary clinical skills, outstanding actions, and contributions to the advancement of knowledge in prehospital care, and excellence in the delivery of emergency care to the residents of Alameda County."

In Special Recognition

Wilson Hoang - A student at Alvarado Middle School for his success in training 96 people in CPR with his CPR AnyTime kit as part of the EMS CPR-7 Project.

Junction Avenue K-8 School for excellence in Community Outreach in Alameda County's Friends and Family CPR 7 Program.

Siren Awards

We gave four Siren Awards this year. This award recognizes a team of EMS professionals who participated in a memorable and successful call, resulting in the resuscitation of a cardiac arrest patient.

Siren Award #1 Berkeley & Albany Fire Departments

Firefighter/Paramedic Robert Lawrence and Firefighter Paramedic Jon Fischer of Berkeley Fire; Captain/Paramedic John Weitzel, Captain/EMT Dustyn Wiggins, Engineer/EMT Jim Deroque and Engineer/Paramedic Bill Dennehy of Albany Fire; and YMCA bystanders.

Mai Bazner, age 56, had problems with angina-like

chest pain previously but nothing had been definitively diagnosed. On February 5, 2011, she was working out at the YMCA when she suddenly went unconscious. A physician, who happened to be in her class, started CPR. A trainer applied an AED but no shock was advised. When EMS personnel arrived, they defibrillated her at 150 joules one time - and got pulses back. Hypothermia was induced and a 12 lead ECG was done. Enroute to the ED, she had return of spontaneous movement. She ended up with a positive outcome.

Siren Award #2 Oakland Fire Department & AMR

EMT Alis Muller and Paramedic Jon Kuppinger of AMR; Lt. Ekundayo Wilson, Firefighter Kevin Moore, Firefighter/Engineer Robert Garcia, and Firefighter/Paramedic Javan Smith of Oakland Fire; and bystanders Andy Hill, Mario Molina and Caroline Bennett.



Forty-two year old Chris Dirks was jogging around Lake Merritt on May 1, 2011 when he noticed his heart rate monitor had a rate of 160. He then sat down in the grass. Andy Hill, a bystander approached him and noticed that he "looked cold and clammy." Chris then had a seizure and went lifeless. Andy called for help. Another bystander, Mario Molina did mouth-to-mouth breathing while a third bystander, Caroline Bennett, called for help and talked with a dispatcher. A fourth unidentified bystander did compressions. Oakland Fire arrived on scene, inserted an OPA, and began compressions. AMR arrived. The monitor showed V Tach without pulses. Chris was defibrillated with 200 joules. The monitor continued to show V Tach; pulses were present intermittently. He was shocked again and regained pulses. The crew kept CPR going for a time to ensure adequate blood flow. Chris regained spontaneous respirations enroute to the ED. He was discharged from the hospital and met with the crews to express his appreciation.

Siren Award #3 Fremont Fire Department & AMR

Paramedic Josh Jory and Paramedic Derek Alderson of AMR; and Captain/Paramedic Charles McClowsky, Engineer/Paramedic Bill Hawkins and Firefighter/Paramedic Robert Hall of Fremont Fire.



On July 28, 2010, Madhu

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Awards Luncheon (Continued from page 3)

Iyer was exercising when he began to experience some chest pain; the chest pain subsided with rest. He went home and suffered a syncopal episode. When Fremont Fire arrived Madhu was awake and alert. As the ambulance from AMR arrived, he suffered cardiac arrest and "just went into V Fib" according to one of the medics. CPR was done for two minutes. An OPA was placed.

The monitor showed V Fib; Madhu was defibrillated at 200 joules. Compressions were continued immediately after defibrillation. After two minutes of CPR, the monitor showed a normal sinus rhythm with occasional premature ventricular contractions (PVCs). A pulse was present. Within minutes, Madhu woke up and gagged on the OPA. He returned to a normal level of consciousness and vital signs. A twelve lead ECG showed a STEMI (ST segment myocardial infarction) – a "heart attack." At this time, Madhu was complaining of nausea and shortness of breath. He was given aspirin and nitroglycerin. He received a stent at Washington Hospital.

Siren Award #4 Livermore-Pleasanton Fire Department & AMR

Paramedic Dave Brecht and EMT Joe Durrenburger of AMR; and Captain Dennis Burns, Engineer Todd Whitehead and Firefighter/Paramedic Steve Davis of Livermore/Pleasanton Fire; and bystanders Richard Amato and Heather Hughes.



Marcus Brown, 27 years old, collapsed at work. His coworkers called 911 and began CPR until ALS arrived. Upon ALS arrival, Marcus was found in Vfib and shocked once. He regained a rhythm for approximately one minute; then went back into Vfib. He was shocked a second time with return of spontaneous pulse and respirations. A 12 lead EKG was transmitted enroute to the ED with a reading of "Acute MI Suspected." The cardiac cath team was waiting for Marcus upon arrival. Emergency diagnostic angiography was performed with no intervention required.

Provider Awards

Alameda Fire Department

Firefighter/Paramedic Joshiwa Sanders

Alameda County Fire Department

Captain Robin Payne, Paramedic

Albany Fire Department

Firefighter/Paramedic James Sanders

American Medical Response

Paramedic Jen York

Berkeley Fire Department

Firefighter/Paramedic Kristin Tucker

East Bay Regional Parks Fire Department

Lieutenant Aileen Theile, EMT

Emeryville Fire Department

Captain Steve Hickey, Paramedic

Fremont Fire Department

Captain Gary Ashley, Paramedic

Hayward Fire Department

Alameda County Fire Engine 13 -
Captain Vince Martin, Engineer Dan Rice and
Firefighter/Paramedic Miguel Garcia

Livermore/Pleasanton Fire Department

Firefighter/Paramedic Scott Canfield

Oakland Fire Department

Firefighter/EMT Maria Barairo

Piedmont Fire Department

Firefighter/Paramedic Mike Pavao

ProTransport-1

EMT Brittany Silva

Royal Ambulance

John Thane

Bear Hug Award

Amy Sholinbeck was presented with the Bear Hug award for her work to reduce child and youth disability through her involvement in the ACPH Asthma Start-Up Program. Her efforts have made a difference in the lives of children in Alameda County.

Heart of EMS Award

Wellington Jackson – Firefighter/Paramedic, Alameda County Fire, was recognized for his exceptional dedication to reducing health inequities through his involvement in volunteer activities with the Bay EMT Program and Camp Sweeney project. He is a role model for coworkers and others in the EMS community.

Alameda County "EMS Corps" (Continued from page 2)

The EMS Corps program combines academic support, mentorship, coaching and professional exposure to provide its students with a unique immersion to a highly demanding emergency medical career. As part of their curriculum, at-risk minority males will pass through academic assessments aimed to gauge and address their academic needs. In addition, students will be required to complete an "Introduction to Fire Science" course at Merritt College to leverage their preparation for the Fire Academy.

To ensure academic achievement, the EMS Corps Program will extend specialized tutoring and mentorship throughout the duration of the program. Tutoring sessions will be held biweekly at EMS with the goal of providing wrap-around academic support to EMS students. In combination with academic tutoring sessions, the EMS

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The Power of One

One East Bay Student's CPR Obsession
By Joe Rosato Jr. NBC News Bay Area
Wednesday, Jun 8, 2011

On a normal day, not long ago at Alvarado Middle School in Union City, P.E. teacher Mark Simmons gave students a lesson in CPR. "We felt it's so important for the kids to learn CPR," said Simmons. "And then teach other people about it."

Alameda County Emergency Medical Services provided the school district with CPR kits that included a rubber practice mask, an instructional booklet and DVD. Simmons showed the video in the gymnasium, and then challenged his students with a simple homework assignment. "I figured they'd at least go home and teach their parents and maybe a couple others," he said.

What Simmons didn't realize at the time, is that his assignment had set wheels in motion in the mind of 13-year-old Willson Hoang. When Hoang's mother picked him up from school that day, he begged her to immediately sign his CPR permission slip.

What happened next, is that Hoang not only ran with the ball his teacher had tossed him, he punted it into the next county. "I trained my family," said Hoang in a quiet voice, nearly drowned out by a gym full of students. "Then I started training other people which lead me to go train this Buddhist temple." The first time Hoang trained someone in CPR, he was required to turn a certification form into his coach.

"He turned that in and then he asked for more," said Simmons. "I gave him more and more and more and pretty soon, I had I don't know how many?"



Thirteen year-old Willson Hoang
Alvarado Middle School, Union City

Using his CPR kit, Hoang trained family members. He trained friends. When the Hayward Buddhist temple he attended wanted members to bring something for show-and-tell, he started training adults there. He organized the classes himself. By the time he'd finished, he had taught CPR to nearly a hundred people.

"At first I thought he was just going home and filling them out," said Simmons of the certification forms. "I was like... Willson are you getting these people? 'Oh yeah coach.'"

Hoang trained people 96 in CPR, a record for Alameda County. On Tuesday, the county EMS awarded Hoang a plaque, proclaiming his heroic effort.

But it turned-out there was a deeper meaning to Hoang's valiant CPR-training obsession. As administrators pressed-him for his motivation, he revealed the source of his inner-calling.

Several years ago, Hoang's father died of cancer. The son remembered his father struggling - the seizures in the hospital. It

occurred to Hoang that if his father had needed help back then, he would've wanted someone to have the emergency skills to help. "I want people to save lives because my dad passed away," said Hoang. "That motivated me to go do more."

Alameda County did a recent study that revealed seventh graders are more likely than tenth graders to teach CPR skills to others. So far, the county's program has trained 10,069 students.

It's unlikely any of them heard the call as loudly as Willson Hoang.



Providing Peer Support When a Child Dies

by Anne Bisek, Psy.D, Clinical Psychologist

Jared had been with the ambulance company for six months when he responded to a school bus crash with multiple fatalities. Two months later he dreaded going to work and jumped every time the alarm went off thinking, "Not another dead kid." When it turned out to be a false alarm Jared became angry. Finally he approached Pedro who was on the Peer Support Team, "Am I the only one who feels this way? It's like I am going crazy." Pedro reassured him, "No Jared; sounds like those are normal reactions to an abnormal situation." Jared persisted. "It sure doesn't feel normal. Why do these daily things freak me out now?"

Pedro went on to explain the difference between a trigger and a symptom. A trigger is a reminder of an event; a symptom is a response to the trigger. Triggers can be internal (i.e. your thoughts, memories or emotions about the call) or external (i.e. someone asks you about the call).

Pedro shared some examples from his nine years as an EMT. "I remember after one bad kid call the smell of diesel

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EMS fees can now be paid by credit card online or at the EMS office.

NEWS & ANNOUNCEMENTS

The **California Medical / Health Functional Exercise** will be held Thursday, November 17 from 8:00 am to noon. Participant will have an opportunity to evaluate current response plans and capabilities for a response to a disruption in the public water system. If you are interested in participating, please contact Cynthia Frankel at Cynthia.Frankel@acgov.org or 510-618-2031 for more information.

Peer Support (Continued from page 5)

fuel would make me lightheaded. Whenever I drove past the street where the accident occurred, my heart would race, my mouth would dry out and I would get tense. Even cloudy weather – it was cloudy on the day of the call – would piss me off and I just wanted to be left alone.”

Jared sighed. “So it’s always going to be like this?” Pedro shrugged. “I doubt it. The thing is, triggers will always be there. For me, time, debriefing, peer support, and taking strong care of myself (i.e. exercise, friends outside of rescue work, eating healthy) my reactions have become less frequent and not so intense.” Jared persisted. “But I’ve been on other tough calls and I’m fine.” Pedro replied, “Not all calls for service require peer support or a debriefing. Calls don’t affect us all the same way.”

Like Pedro, your experience as a peer can be a valuable resource for your colleague.

What helped you cope after a tough call? The symptoms your colleague is experiencing may be normal reactions to an abnormal event. How long did your symptoms last? What used to bother you but doesn’t anymore? What helped you? You can help your colleague normalize her/his reactions, help them feel less isolated and crazy and provide useful tools in dealing with those reactions.

What made Pedro such a successful peer supporter is that he didn’t give advice or try to solve Jared’s problems. Knowing when to call for back up is an important peer support skill. Pedro keeps the names and numbers of the psychologists he trusts in his smart phone. He has the Employee Assistance Program binder at home. He knows that if a colleague needs more in-depth help, or if the normal reactions get worse or don’t fade with time, a referral is sometimes the best call.

The International Critical Incident Stress Foundation (www.icisf.org) has information on local peer support teams such as the Fremont Police Department CISM team, the San Mateo County CISM team the San Mateo Sheriff’s OES peer support team and a team near you.

The California Peer Support Association (www.californiapeersupport.org) provides training and networking with peer support teams throughout the state.

Editor’s Note: Anne Bisek, Psy.D. is a clinical psychologist in Fremont, CA. Her practice focuses on first responders. She is the mental health professional on the San Mateo CISD team, and also provides debriefings for the California Highway Patrol. You may contact her by phone (510) 797-4911 or at www.Doc911.net. Pedro the Peer Supporter is a fictional character, but the resources are real.

Alameda County “EMS Corps” (Continued from page 4)

Corps program has partnered with Oakland fire fighters to provide mentorship to the participants.

As a separate component to the academic support and mentorship, all students will participate in transformative mentoring, male development and life coaching workshops led by EMS Corps Program Manager, Mike Gibson, and Dr. Valerie Street. The majority of the trainings and work development workshops will take place at the EMS offices. This unique combination of mentorship and academic tutoring will give EMS students the necessary support to succeed in the classroom and simultaneously gain first hand exposure to an EMS career.

It is expected that the EMS Corps outcomes will mirror many of those of its predecessor at Camp Sweeney - 100% completion rate of high school and/or GED and 98% improved outlook for the future.

Questions about EMS Corps can be directed to Michael Gibson at 510-618-2025 or michael.gibson@acgov.org.