

TOES

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Emergency Instructors Newsletter
Special 2nd Anniversary Double Issue!

Editor Valerie DeFrance
v.defrance@
worldnet.att.net

Editors Corner

Two times the goodies as TOES turns two! Much like any two year old, TOES has improved its grasp on communication, is still testing the waters, and is pushing the envelope. TOES has grown tremendously in the last two years, both in content and readers. May the next year be as productive and may we always get such wonderful writers to contribute.

This issue, a special treat is in store for you. Teaching Prehospital Geriatrics, by Jim Crabtree is more than just an article or a few tips. In Jim's second contribution to TOES, he has written in-depth and in a style you could use as a solid foundation for everything you need to cover in geriatrics. Not only that, he gives us all some food for thought, presenting a realistic view of the geriatric patient.

With this issue it is also time to cease labeling our The Other Side columnist, Marilee Davenport, a 'student.' Marilee came on board while attending an EMT A course to provide the perspective of the student. While she is not 'officially' a student any more, she still brings us valuable insight from one who does not instruct, but receives instruction. We are pleased she is remaining as one of our most consistent and solid writers.

And of course, what would an issue be without the Puzder! At first she thought she would miss this issue, but being the strong supporter of TOES that she has always been, she could not bear *not* contributing and dashed off a bit of humor for us that we can all relate to.

All this and much more.
Happy Birthday to us, and as always-Enjoy!

Valerie DeFrance, TOES Editor

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How about **Explaining Shock to Bystanders and First Aiders** by Frank Polifaco, RN for starters?
- **Got an article, tip or trick?
Send it on!**

Teaching Prehospital Geriatrics

by Jim Crabtree

**Geriatrics & gerontology, a subject that often strikes fear in the heart of an instructor.
Why is this and what can be done about it?**

While there is lots of information in print on the topic of geriatrics almost none of it is appropriate for teaching prehospital care providers. Very little guidance is offered in the national standard curricula (none in the latest paramedic curricula). And so the teaching quite often winds up being a list of depressing, chronic diseases that are inescapable to everyone as they age. It is no wonder that the students we teach are turned off and lack any real understanding of the subject.

Is this an important subject? Absolutely!

There are two converging factors that are going to make for a large population of older folks well into the new century. First is the baby boom that America experienced as the result of long separations of loving couples during World War II. The years of 1945 to 1964 saw very dramatic birth rates, this demographic is now at least 36 years old with many members at or close to 55 years of age. As this population has moved through life they have established and defined social behavior, fashion and marketing. In the 1950s it was fashionable to have a baby, there were baby stores everywhere. In the 1960s baby boomers were the youth movement that swept the country, (60s hippies were boomers) during those years, it became fashionable to be young and single. They reached their maximum earning years in the 70s & 80s and society focused on wealth and stability. Now in the double zero years, look forward to "elderly" becoming fashionable. Expect to see more services and business catering to old people. Business and industry cannot exist without adapting to the needs of this demographic group. EMS is no exception. The second factor are the improvements in health care technology that have allowed people to live longer than they ever have before. Diseases and conditions that used to routinely kill people in their 50s now can be either conquered or at least controlled, and this allows many more individuals to reach a

very old age. An old age that brings with it special considerations.

Besides just having an increase in the overall number of elderly people in society, there is another factor that makes this so important to teach in EMS training classes. Many ambulance companies are private concerns that must thoroughly integrate customer satisfaction into their business plan. Even public and volunteer agencies need to provide services that are appropriate for the population that they serve, if they are to continue to receive funding and donations. But you can't properly service this unique demographic grouping unless you understand it.

Understanding the elderly age group is something that EMS providers and their instructors do not do well.

If a well-founded theory of dealing with older patients can be taught to EMS providers at the beginning of their careers, it will have lasting benefits for everyone involved.

I became involved in geriatrics by accident. During the 1960s my retired grandfather was involved with the "Grey Panthers" and became very political promoting the rights & accessibility of senior citizens. Every family holiday and get together I had to listen to all the problems that faced old people and the protests and campaigns that he was engaging in to remedy the situation. This was of little interest to me as a pre-teen, but I guess some of it did sink in. Later while studying for my Baccalaureate degree in Nursing, a series of circumstances prevented me from studying critical care as I would have liked to and I was forced into gerontology classes. I was determined that I was not going to learn anything. I constantly challenged the instructor and in the end was forced to reevaluate and synthesize some gerontological concepts that were not in the texts. When I

finally began to understand what makes this phase of life different, then the entire subject finally began to make sense. It is these basic concepts that seem to be missing from most all classes & lectures that attempt to teach medical professionals how to work with old people. The intent of this writing is to help you answer the riddles of aging for yourself so that you can share what you have learned with your students.

It is critical that you and your students truly understand what makes old people different from younger people so that the special needs of this age group can be addressed.



In teaching gerontology to EMS providers you first have to acknowledge and overcome the denial and stereotypes that exist in the minds of your audience. The vast majority of EMS education is delivered to persons who are below 35 years of age. In fact I would guess that most EMS students are below 25 years of age. It is not uncommon for an EMS instructor to be around 35-40 years of age. As an instructor, imagine somebody who is twice your current age. Would you consider them to be “old”? Sure you would, and what age would that be? Maybe 70-80 years. When you begin to speak about “old people” during a lecture, an age range of 55-60 (or older) might appear in YOUR mind. The students however are imaging 40 year old people as geriatric patients! Do the math, a 40 year old is TWICE the age of a 20 year old.

As an instructor you must understand how the human mind defines an “old person”. Human beings can only see themselves approximately 5 years into the future. A person can describe what their life might be like, where they would live and what other people in their life they would be relating to. Thoughtful consideration can maybe imagine 10 years ahead but, anything

that is 15 years or beyond a person’s present age is basically unimaginable. They can describe how their grandparents live but the realities of youthful denial prohibit them from seeing THEMSELVES at an advanced age.

Your EMS students will have a physical difficulty understanding or relating to anything you say about “old” people. When you teach pediatrics your students can remember their own youth. When you teach geriatrics, your students can never truly understand what it means to be “old”. These are very powerful stereotypes and supposition that you absolutely must cut through if your students are going to understand the subject.

In years gone by, when grandparents routinely maintained close daily relationships with younger family members, younger generations got to see and experience the daily life styles of older individuals. Today’s families that are extended by distance and relationships such as divorce and remarriage can provide serious impediments to younger people to learn or experience what it is like to become old. Before you can teach any geriatric information to your class, everybody must be on a level playing field, you must define “old” and “aging”.

Begin by asking the students to define an “old person”

I like to pick on the youngest person in the room and ask them “At what age does a person become old?” or “How many birthdays does a person have to celebrate before they should be considered old?” I then ask the same question of the oldest person in the room. (hopefully you have a 30+ year old person in the room) Even if the students are hesitant to answer verbally, you can coax an agreement out of the younger person that ‘old’ begins at around 15 years their senior (calculate the figure in your mind and ask if they agree with it) Then ask the older student if they agree that that calculated age best defines an “old” person. You will quickly find out this disparity in perceptions.

Properly used, this discussion can quickly combat the misconception that a numerical age can be used as a basis for judging what makes

a person old. Numbers don't matter. In your EMS system there may be definitions for old. Arbitrary ages when geriatric rules or policies begin to apply. These arbitrary ages have a place in the law but not in medicine. You cannot recognize a "old" person by their numerical age.

Continue moderating the class discussion about trying to pick an age that can be used to define "old". Very often the number 65 comes up. Ask if anyone knows where the age of 65 years as a definition for old or retired came from. The answer of course, is that it is/has been the retirement age for collecting Social Security benefits. Once upon a time it was a MANDATORY retirement age and you were PREVENTED from working at any job past your 65th birthday. Break a stereotype concerning aging by enlighten the class with the following information. The age of 65 for becoming retired and collecting social security was set in 1935 when President Roosevelt signed the Social Security act. In 1935 the life expectancy for a working male (the person most likely to collect benefits) was 62! Yup, Social Security was set up to pay people who had lived three years past their life expectancy. Statistically you were suppose to die on the job. Today the age of 65 is not really considered old, but in 1935 it was ancient. Can the mere act of being 'retired' be used to recognize an old person?

Using retirement as the transition, I next lead the discussion into the retirement age for various professions. In the Los Angeles County Fire Department, mandatory retirement occurs at 60 years of age. (Check you local department they may also use a very young retirement age) Do any students consider 60 to be very old? (Generally not) Then I ask them what the retirement age is for an NFL football player. (30-35) Does anybody consider 30-35 "old"? Then I ask the clincher question "What is the retirement age for an Olympic gymnast?" (14-16 years old) Does anybody consider this person old? No, of course not. What this discussion can do, is strike out "retirement" as a basis for judging whether a person is indeed old.

If you want to get into a deeper geriatric discussion, it is here that you could describe how 'retirement' is actually becoming less

desirable. People who continuing working live longer. Before you as an instructor get scared about working well into your 70s recognize that switching jobs & careers late in life is how 'retirement will probably be handled in the future. Retirement pension plans have historically been calculated to only pay out for approximately 5 years after job separation. Individuals who have been retired for 10-15 years (or more) represent a huge drain on pension and investment funds. Expect increasing pressure in the future for older, able bodied people to return to work, even if it is just part time.

The next question to ask in your effort to break down misunderstandings about old people is "How do you recognize an old person when you see one?"

For every response, you need to present a comeback where that attribute is not true. When the class identifies 'old' as being someone who is unable to walk, or see, or take care of themselves, bring up an example of someone whose numerical age is very old but their capabilities are very high. Statistically and demographically very few old people are bedridden cripples. The vast majority of the geriatric population live in their own home and manages their own affairs. "Feeble old people" is a stereotype.

When George Burns was still alive I used him regularly in my lectures. Here was a famous individual who still worked regularly, appearing on stage and was still quite capable even at 100 years of age. Identifying a person who is in their 70s or older who still runs in a marathon races is an excellent example to come back with. Discuss how some 50 year olds are bedridden while many 90+ year old people are still living independently. (maybe even still driving) If you have any local examples of residents that the class would know, by all means use them. This discussion can dispel the stereotype that all old people are frail and incapable. Some are of course, but most are not. Each person must be judged individually.

This is the point where I ask if anyone can define "senile". Hands quickly spring up to say something about forgetfulness, and

disorientation, and losing one's mind but they are all wrong. Senile simply means “. . . of or pertaining to aging and the elderly”. Destroy another stereotype, reenforce that not all old people are crazy or have lost their mental faculties.

If handled properly this discussion can set up a sense of wonder about geriatric patients in your students minds that you are about to fill. Review with you students that you can NOT identify an old person simply by their work status, nor by their chronological age, nor by their capabilities.

So what DOES define aging? How can you recognize an old person?

Very simply it is “losses”.

As a child you gain, and grow. Babies learn to roll over then sit up, then walk, then talk, then read and write, eventually come job skills, and earning power and a family of their own. Gain, grow and acquire. All this growth levels off in the peak years of 40-50. After that, aging brings on losses. Sometimes losses in health and capabilities and sometimes losses in income. Eventually loses in relationships as friends & spouse die. The absolute worst loss is the loss of personal independence. Not being able to live in your own home any longer.

If you want to judge how ‘old’ a person is, look for losses in their life. Look for losses in capabilities. Eventually your lecture will get into the many diseases of aging and other geriatric problems but remind the class that it is NOT inevitable. Not ALL old people have the problems that you are going to relate. Each person must be judged on their own merits and abilities. A 50 year old patient with very poor health may actually be more of a “geriatric” patient than a 100 year old person who still lives independently. Teach your students that while they are taking a patient's history they can look for clues so determine how “old” a person really is. How many geriatric interventions will be needed in their care. Clues such as the number of chronic diseases, the number of prescription drugs taken, the presence of a spouse or family members, whether the patient is living in their own home. The more a person still has, the more independent they are, the “younger” they actually are. Regardless of their chronological age.

A prehospital provider cannot let their own stereotypes get in the way of a good assessment.

Geriatric stereotypes can subconsciously assign all types of problems to an older individual and can prevent the provider from seeing the true problems. It will interfere with the biggest job that the rescuer has before them, differentiating between acute problems and chronic diseases. (More about that later)

The final aspect of debunking geriatric stereotypes in preparation for working with old people involves asking some more questions.

“Do personalities, behaviors of interests change as people age?” The answer is no. Most stereotypes assigned to demographic groupings are negative and derogatory. Old people however have some very positive stereotypes that can interfere with helping them. This is the stereotype of the “kind & generous grandparent”. This ‘good’ stereotype must be destroyed along with the negative ones

When young patients act angry and bitchy, healthcare providers can usually assign the behavior to the stresses of pain or disease or maybe a generally unsociable personality. Older people on the other hand are “suppose” to be sweet & kind and forgiving at all times. When old people are rude & nasty, younger people can take greater offense at their behavior and are more apt to act in retaliatory ways. Remind your class that people arrive at old age carrying all the baggage that they have hauled throughout life. Just as there are mean, rude and nasty young people, there are mean, rude and nasty old people. Somebody who was cranky and unsavory when they were younger is not going to change as they become older. Teach your students that there is no more a “correct” type of behavior for old people than there is for younger people.

Now comes the clincher questions. The ones that are set up to ask the class to apply what they have learned and explore how the

principles of gerontology are going to affect their daily work routine.

“What rights or privileges have people earned, just by becoming old?”

“Is there something that EVERY person has earned, just by arriving at old age?”

Follow up questions to promote a discussion include; Do old people have the right to be rude? Do they have the right to break laws? Should an exception be made for them to act as they please?

There are two common answers that I have heard as an answer to the questions about rights & privileges. The first is that old people are due certain discounts in restaurants and other businesses. This is not really true. While there is a decrease in income that accompanies aging and retirement, many old people are sitting on vast fortunes. People who are today age 60 and up participated in one of the greatest periods of economic growth the world has ever known. There are literally trillions of dollars in cash and assets waiting to be inherited by a younger generation. No, there are many old people who can easily pay a full price. As a side point you can inform your class that the biggest population in our country that lives daily with poverty are children. Especially the children of single parents. If anybody truly deserves discounts in the marketplace, it is them.

The next most common answer is “Respect”. Old people deserve respect. This is a very cute stereotype that has been drilled into younger folks by older folks. Much like the myth of the dear, sweet grandmother, it is not true. All people must be judged and dealt with individually. The myth buster to use in this case is Charles Manson. Charles Manson was convicted of several mass murders in 1969. Originally sentenced to death, court rulings concerning the death penalty changed his sentence to life in the 1980s. Clearly a disturbed and psychotic individual. Charles Manson is now over 65 years old! Does he deserve any special respect? No, of course not. What about a 70 year old child molester? Maybe an EMS patient will be a 70 year old man who was injured when he was beat up by a little girl’s father when he caught the old man with his daughter? Does a 70 year old child molester deserve any special

respect because of his age? Sure the rescuers will be expected to put away their feelings about child molesters and properly patch up and transport the patient, but what special things should they do for him solely because of his age?

What has EVERY older person in society earned, solely because of their age?

If you define aging as losses (as we did earlier) you will understand that one thing that every old person loses is speed. There is nothing that you do as an old person that you can do as quickly as you did when you were younger. Everything takes longer. Walking, moving even formulating ideas and talking. The ability to do things quickly is a universal loss. (Of course, this loss occurs at different rates for different people)

The one thing that ALL old people deserve just because they are older is TIME.

Do not force old people to go faster. Trying to speed up old people is just like trying to teach a pig to sing, all it will do is frustrate you and anger the pig. So it is when you quicken the pace in gerontology. It just angers and frustrates the old person.

Charles Manson in prison, has earned the right to not be rushed into getting dressed and going out into the exercise yard like he would have been when he was a younger prisoner. The 70 year child molester is not going to answer your history, allergy or medications questions as quickly as a younger person. Let old people do things at their own pace.

This unique aspect of old people (their slowing down) universally files in the face of the way younger people behave and can cause them great stress. Patients who don’t answer questions fast enough, patients who cant move from the gurney to the bed fast enough are very frustrating to younger care providers who took an ambulance job hoping for a fast paced, exciting work environment. If you can get a younger person to understand that they must take their time with older people, it will relieve lots of tension between the generations.

Now, how to teach a geriatric assessment. We have seen how old people must be judged as

individuals, how the stereotypes of aging must be overcome to get accurate information.

The job of completing an accurate assessment and deciding on a treatment plan is really the problem of differentiating between old problems and new ones.

Remember the definition of aging as "losses", the older you get, the more physiology you lose. (Actually **all** body systems decrease by 1% a year after the age of 30. This is why "most" people die after age 80, their physiology is 50% gone).

Younger people commonly think that all old people display every disease process in the book. While chronic diseases are common in the elderly and their treatment is beyond the capabilities of prehospital providers, new problems that are true emergencies must be identified and dealt with.

Example: a 90 year old man goes to his doctor and complains of a pain in his left leg. The doctor says, "Well what do you expect you are 90 years old" The man reminds the doctor that his other leg is the same age and it doesn't hurt. This is the approach that any health investigator must sort through. What is your problem right now? What were your problems yesterday, last week, last month. By linking symptoms to time, it can provide a clear understanding of what the emergency might actually be. A competent, complete evaluation of the problem is also what every person (young and old) is entitled to.

SOME COMMON PHYSIOLOGICAL CHANGES IN THE ELDERLY AND SOME THINGS EMS PERSONNEL CAN DO ABOUT THEM AND EXPECT TO SEE BECAUSE OF THEM.

Blood vessels (coronary and peripheral)

Vessel elasticity is decreased by as much as 70%, elastin fibers straighten, fray and fragment, and atherosclerotic plaque builds up. Peripheral resistance - increases, which leads to increased systolic B/P

EMS significance: Expect higher B/Ps in elderly but don't necessarily think it is bad or a sign of

disease. Also don't depend totally on B/P to determine if a patient is in "shock". An elder who has a normal B/P of 140/90, may be in shock at 120/70.

Brain

There can be reduced cerebral blood flow with decreased sensitivity to outside stimuli, reducing response times. The intellectual function of the elderly is usually intact. However, it may take longer for them to interpret what they've seen and heard.

Remember: the elderly must do things at their own speed

The elderly also use what is called "crystal intelligence" compared to younger people who use "fluid intelligence". (Old people think and reason based upon past experiences rather than looking for new approaches.)

EMS significance: Elders will have trouble recalling information quickly (they may also have complex medical histories to try to recall) and they may have trouble figuring out medical devices that they are expected to use such as inhalers or breathing machines Even using a spray nitroglycerine instead of pills may cause confusion. They may not understand EMS equipment like backboards, splints, gurneys.

Special senses

Vision - the lens begin to stiffen and lose water older people have difficulty focusing (physiologic farsightedness)- the lens also begins to yellow and becomes cloudy so they have difficulty seeing colors.

EMS significance: Expect the patient to need glasses. Bring them to the hospital, and don't be afraid to clean them! Don't give papers to an elder that contains small print and expect them to be able to read them. (Such as AMA forms or billing information)

Pupils become smaller so it takes longer to acclimate to darkness. Old folks have difficulty seeing in dim light.

EMS significance: Because reflexes are slowed your PERL checks need to be more fastidious.

Hearing - degeneration of the cochlea can cause patients to have difficulty with high frequency sounds (presbycusis) Don't assume confusion if they can't hear you.

EMS significance: Don't yell, get close and speak slowly in low tones. Elders may be able to hear a man's voice easier than a woman's. Elderly drivers may not physically be able to hear your sirens. Make sure you let the siren cycle to a low pitch at intersections.

Touch - There is a diminished sensitivity to pain, heat and pressure

EMS significance: patients may not be able to tell you about injuries after a trauma situation. (ex: A second degree burn may not produce pain). They may not tell you about pressure points i.e. lying on equipment that was left on the gurney. You **MUST** do a complete body check if you suspect trauma. Just asking "where does it hurt" is **NOT** a good assessment.

Muscles / bones

Muscle fibers - there is a decrease in the capillary circulation and innervation which results in the muscle tone and mass decreasing. The strength is diminished as well as flexibility, ROM, balance and reaction time. Greater chance of injury after a traumatic situation. Joint/cartilage - the joints begin to erode causing pain with movement (osteo-arthritis)

EMS significance: Do not force or bend any elderly joint! Also do not rush people when requesting them to move "Can you slide over to the bed from the gurney". (Remember their right to do things at their own pace).

Fractures

Bone loses minerals as it ages, so there is an increased risk of fractures as you age (especially women after menopause) - immobilization or excessive Calcium loss from the bowel or kidney can accelerate mineral loss

EMS significance: Fractures - Did the person fall and break their bone or did they break the bone and then fall? Especially susceptible is the hip. ("I've fallen and I can't get up" is a very real

situation) Elders can break their bones easily and may not feel any pain from the injury.

As an example in class I compare the pain expressed by a patient with a geriatric hip fracture to any other type extremity fracture. Younger people often times shout & cry more. They seem to be experiencing pain more acutely than elders.

Gastrointestinal

Decreased saliva resulting in dry mouth - leads to poor dental care and loss of teeth (major cause of malnutrition)

EMS significance: Expect the patient to have false teeth and bring them along to the hospital.

Diminished esophageal peristalsis - they have more heartburn and reflux gastritis

Delayed stomach emptying - this leads to decrease in appetite and thirst and can lead to malnutrition as they won't eat if they don't sense hunger

Diminished gag reflex -patients can choke easily, and have some difficulty swallowing

Decreased intestinal motility - elders can suffer from constipation or fecal impaction

Decreased anal sphincter tone - then they can have fecal incontinence

Liver size, weight and efficiency decrease - this can result in toxic effects of drugs as many are cleared in the liver

Genital-urinary

Decreased bladder capacity - decrease innervation, increased frequency, urgency and incontinence. Also weakened musculature and sphincter tone, increase in nocturnal

Decreased renal clearance - there is an increase in toxic or adverse effects from medications

Enlarged prostate - difficulty initiating stream or urinary retention. ("I haven't urinated all day")

EMS significance: If you slide your hand under an elder do not be surprised to find some "soiling". A bladder that has not been emptied in 24+ hours is an emergency that needs transport to the hospital.

Skin

Thinning of skin layers - become thin, dry and fragile with decreased turgor

Diminished capillary flow - injuries heal very slowly

Decreased sweat gland activity - decrease perspiration

Cellular changes - more skin disorders (i.e. skin cancers)

Decreased sensation - prone to environmental injuries, unable to feel hot, cold or pain they same as younger people.

Temperature regulation can be impaired
Physiological skin reactions to temperature extremes are impaired. (decreased sweating, decreased vaso-motor control) Also, many meds can interfere with the ability of the body to cool itself.

EMS significance: The skin of old people is very fragile! Be extremely careful when handling them. Dragging an old person across a sheet, as during a transfer, could cause an injury similar to a road rash abrasion. And it could take a long time to heal. Also, look for and treat hypo & hyper thermia based on environmental conditions do not wait necessarily for classic symptoms to appear.

Glandular activity

Thymus gland - it's function is in the development of the immune system. By the age of 60 it shrinks by 90% and stops secreting it's hormone. This accounts for the increased susceptibility of diseases.

Adrenal gland - this gland has many functions, one of it's most important jobs is to store catecholamine's which are released in response to stress. Over the age of 70 this gland has decreased by about 25%,

EMS significance: This is one reason the elderly are unable to compensate when they are in shock. Do not look for classic symptoms of early shock such as tachycardia it may not happen till later.

Alzheimer's Disease needs some special teaching. Incurable, and with an unknown cause it can be very frightening. Alzheimer's is of course a disease that slowly eliminates a person's memory. Beginning with simple confusion and disorientation, it progresses into the loss of life skills such as toileting and

dressing, finally rendering the person bedridden as they "forget" how to walk and even exist. Death generally comes from complications of being bedridden. Pneumonia and sepsis are common. This painless disease is much more difficult for the family than the patient. As the patient forgets they don't seem to know what they have lost. The family however has to watch their loved one's personality disappear as the body continues to survive. Eventually the self is gone but the "person" is still living.

Until the entire persona is completely lost however these patients can have breakthroughs of cognition. Periods of consciousness where for brief instances they realize how much they don't know. This can cause confusion and panic. They can easily misinterpret who people are or what they are trying to do. These 'panic attacks' are called Catastrophic Reactions.

Alzheimer's patients can scream yell or even physically strike out at people. In these situations EMS providers should remember that these periods of extreme emotional display do not last long.

1. Do NOT argue with the patient
2. Do NOT escalate the situation
3. DO attempt to calm the patient
4. DO attempt to orient the patient

In a few moments they will return to their confused self and forget about whatever was bothering them. You can even expect them to forget that they were ever arguing with you

The Alzheimer's association can provide some excellent videos describing how EMS personnel can better work with these patients.

Elder abuse

Child abuse seems to be better understood and its existence seems to be more easily accepted by medical personnel. There are some medical personnel that even deny the existence of elder abuse and this prevents them from looking for it. When your are teaching geriatrics you must be very familiar with the elder abuse reporting laws in you state. Relate and reinforce them to your students.

Elder abuse is difficult for some people to understand because they can't understand how (or why) anyone would beat up on an old person. This lack of understanding has its roots in the "dear sweet grandma & grandpa" stereotype.

What are the reasons that somebody would beat up on an old person?

Some common reasons include;

1. The abuser is just plain cruel, mean & sadistic
2. The "abuser" was the victim of abuse as a child and they are extracting revenge against the parent in a role reversal situation.
3. The abuser does not understand the stresses that build up in a geriatric-adult child relationship.

This third one is the one you can use to the illustrate to your class how everyone has the potential to become an elder abuser.

Hopefully you have a number of married individuals in your class. Begin by asking you students to imagine the death of their father in law.. Their mother in law then finds herself living alone in too large of a house that she can't maintain. 'Common sense' has her moving into the spare bedroom at the student's house. Mother in law then becomes part of the student's married life because she is now alone (and lonely) she is now accompanying them out to dinner, to movies and parties. Eventually she becomes older and incontinence sets in. She now occasionally soils the carpet & furniture.

Is it hard to imagine becoming so frustrated that even a family member would strike out at her? I have not yet had a class of students not able to imagine how they themselves could wind up hitting an old person.

Another way to create interest in the topic of elder abuse is to ask the question "What type of abuse can happen to an old person that BY LAW, cannot happen to a child?"

The students will then begin thinking; physical? Nope both kids & old people can be beat up

psychological? Nope both can be yelled at, humiliated or psychologically attacked
sexual? Disgusting to even think about, but, nope both can be victimized sexually

The answer is financial. (stealing a person's money) The formal word is "fiduciary" which means a violation of trust. If the old person's resources (social security, retirement etc.) are not being spent on their care & maintenance, or if a younger person has access to the elder's bank account, then a fiduciary abuse may be happening.

Bank tellers are advised to be on the look out for large withdrawals from an elder's account but it is harder to spot this type of abuse in a prehospital setting. One example of this type of abuse might be if it is noted that the elder is living a totally separate level of existence in the same household as the younger people. If everybody looks poor that's okay but if grandma is dressed in rags & eating porridge while others are well clothed and fed, somebody may be diverting monies that should otherwise be spent on grandma's care. Bard & Care type of homes may also be places for fiduciary abuse (as well as other types of abuse). The home is being paid to provide services, if these services are not be provided than the fees may be siphoned off.

Many other methods of teaching geriatrics have been put forth. Such creative methods as having the teacher dress up and act like an old person or having the students simulate geriatric disabilities by applying splints to their arms/legs or Vaseline to eye glasses are all very interesting. Actually visiting a senior center or convalescent home to interact with old people is certainly a great experience. While each of these methods is very good, my particular training program did not allow for the time or money that it would take to be that elaborate. I was hard pressed to try to get a group of 20 year old students to understand the significant points of working with elders using only a classroom and lecture format. In this end I feel I have been successful and I am happy to share my methods with my fellow EMS instructors.

Jim first became an EMT in a rural volunteer department in 1981 and acquired my Associates degree RN in 1986. Obtaining a Bachelors degree in Nursing From Cal State Long Beach in 1992 (BSN) he began his nursing career in the

emergency room at Martin Luther King hospital in Watts, CA where he stayed for 5 years before moving to LA County's Paramedic Training Institute (PTI) where he taught & coordinated paramedic training classes full time for 6 years. PTI is a section of the Los Angeles county EMS agency. For the past year he has been in charge of approving AED programs in LA County among other things. He teaches CE classes on special subjects and recently has been involved in starting a training program to

teach Nuclear Biological and Chemical weapons (NBC, weapons of mass destruction) information to every paramedic in LA county. (~4000 people) He serves on the committees to rewrite & update LA's EMT curricula and a CA state EMT skills task force.

He is currently certified as a Mobile Intensive Care Nurse (MICN) and a Board Certified Emergency Nurse (CEN) as well as have instructor cards for the AHA alphabet.

Reminder: Third Annual National Moment of Silence, to be observed on **Saturday, May 27, 2000**, coinciding with the National EMS Memorial Service to be conducted in Roanoke, Virginia. See the January/February issue for full details.

Do your students GROK? Or are they still TABULA RASA?
Don't know? See the definitions at the end of this issue.

The Other Side by Marilee Davenport



BE PREPARED....



WHO CARES IF YOU GET FUNNY LOOKS!

Don't you hate it when you need something and have to go back to the ambulance for it...that is, IF you can find it there? Over time, I have tried to avoid this problem by taking as much stuff with me as possible. At first, I wore jeans and our department-issued shirt (more on that later). Jeans are fine, but they don't have enough pockets and it's hard to get your hand into them when you're wearing latex gloves...therefore, I decided it was time for EMT pants. All those pockets! I started "stocking up"...extra gloves in the bottom leg pockets, 2 pair in each (what if someone needs a pair in a hurry?), stethoscope in one large leg pocket, bandage scissors and the "make-em-naked" shears in the cool pocket with the slots, small notebook, credit-card-size calculator, extra latex tourniquet (for when whoever stocked the blood draw bags forgot to put one in), penlight and more gloves...for me, behind the scissors. Did I forget anything? Oh

yes...an ALS Field Guide in the hip pocket. I wonder if my BP cuff would be too bulky...and don't forget the pen clipped in the shirt pocket. Now, shoes under the stool in the living room, shirt, bra and newly equipped pants (in that order, from the bottom up) on top of the stool and fanny pack on the counter above the stool. All set...ready for the page!

You're probably wondering why I do it this way... (or maybe not). Our service is all volunteers and we sign up to be on call. We all have radios and when a page goes out whoever is 'on' or is available takes the call. I've got the "get undressed and dressed again" routine down to less than a minute. My main fear is that my neighbor will be coming or going past my front window during the "T-shirt off, bra on" interval. Oh well, we're all adults here...aren't we?

The other crew members have gotten used to me showing up for every call dressed in my "uniform" but I'm sure there were comments made at first. They show up in whatever they happen to be wearing, which is fine I suppose, but I feel that when I am barging into someone's home in the middle of the night, it's a nice touch if I at least look like I'm with the ambulance and didn't just wander in to see what the excitement is all about.

Another thing...(could someone push that box over here please?). I don't understand why most of my crew members arrive on scene and exit the ambulance empty-handed. Sometimes they

There's a formal name for snapping your fingers. It's called a "fillip." I knew filliping had something to do with your fingers, but I thought it only involved one finger. *From Mac McNamara*

Another lovely way to remember things...For the types of shock: **CRAMPS NH**
Maybe it's easy for me to remember because New Hampshire is just about the point at which people start to get cramps in their legs during the drive to/from Massachusetts. *from Jon Kavanagh*

think to grab the O2 and a mask or occasionally the jump-kit. Wouldn't it make sense to take the stretcher (on which other items like the jump-kit, O2, monitor etc. could have been placed while enroute to the scene)? This would be most helpful when responding to a heart attack or a code. Most of us don't throw the patient over our shoulder and carry them out to the ambulance, so why not save a trip and take the stretcher in the first place? There are certain things you will need and those you don't need...so what? They are there in case you do. I remember one call where I ran up and down the stairs and to the ambulance several times to get things that no one thought to grab (this was early on, before I had all the pieces put together and formed my own ideas on things...) and believe me, at my age, it wasn't pretty! There are some on the crew, the newer ones, who do think ahead...bless their hearts...and when they are on a call, it's heaven!

Marilee Davenport, EMT-I, lives in the Colorado mountains, approximately 187 miles west of Denver. She is the oldest "new" (anything less than 10 years is considered "new" on her crew) member of the West Routt Ambulance crew. She got her EMT-B certification at age 47 and now, at age 50, has recently been certified as an EMT-I. See? You can teach an old dog new tricks!

EDITORS NOTE: Marilee is an accomplished sculptress of a special sort. You must see her EMT piece online at <http://www.angelfire.com/co/fantasyfigures/pictures.html>

PUZDER

by Anne Puzder, NREMT-P, Georgia



Questions

Well, they have done it to me again. I keep thinking they will run out of weird questions to ask me, but unfortunately, they just keep coming up with even harder ones. Some of these students must sit up nights trying to find a question that there is no possible answer to, or no reference text in which to find it. I have had some good ones over the years.

Once a year, all EMS instructors are monitored by the state agency to make sure we are still able to teach. I think they do that for those of us who get more senile every day and start reciting poetry instead of EMS material. One year as I was being monitored teaching CPR, I had one of those stupid questions come up. And yes, there is such a thing as a stupid question.

“Uh, Ms. Teacher, if a man has his head chopped off, which dies first? His heart or his brain?” I wanted to chop his head off at that point to find out. This is also the student that raised his hand during a pediatric lecture and said, “How do you keep from wearing out the heels on your high heels when driving?” I asked him if this was an inquiry for a personal problem, or was he just on drugs.

Then there was the student who asked, “How come I get lightheaded every time I have sex? Do you think I am having a fluid shift problem?” He was dead serious. I told him to stop having sex standing on his head, and see if that cured the problem. We used to teach the infection control part of the class at the end of the program. I had a little girl come up to me on

break, and say, “You mean we might catch something out there?!” When I told her yes, she picked up her books and never came back.

How do you answer the student who says, “What if they didn’t have any arms and legs? How do you start an IV?” with a straight face?

Trying not to laugh has been torture sometimes. I handed one of my students a binder clip one time to hold a pile of papers together. After struggling with it for 10 minutes, she asks, “How do I work this thing?” She kept trying to slide the wire ends over the paper and couldn’t figure out how to make them stay. (Yes, she was a blonde, guys) All of my students wear shirts with the school emblem on them when they do clinicals. One of my preceptors went out to check on this same girl during one of them. His name was sewn on the front. She runs her finger over his name and says, “What does Umstatted mean?” Thinking it was a mnemonic for something else.

“How many hours will I have to take for the 48 hour refresher?”

“Can you eat oxygen?”

“How many ccs can I push through a blown IV?”

“If a blind woman is giving birth, do I still have to show her the baby?”

And on and on. Last week, I was asked what percentage of total body water was found in

bone. That is at least an honest weird question. Tomorrow, we are finishing up on fluids and electrolytes. I have been preparing myself for unforeseen questions.

Question:

“If an alien sucks all the calcium out of your bones, can you quickly eat a roll of Tums to keep from becoming hypocalcemic?”

Answer:

‘Yes. And if you are fast enough with the bug spray, you might be able to kill the alien at the same time’

Question:

“Now, if potassium is the primary intracellular electrolyte, where will it go if we turned all the body cells inside out?”

Answer:

‘It would still be the primary intracellular electrolyte because the inside is now the outside, and the outside of the cell is now the inside. And if I pull your lips up over your head, will you still be able to ask me these silly questions’

Anybody have an answer to the water/bone question out there? I’m still looking.

Anne Austin Puzder, NREMT-P, has been in EMS for over 17 years, teaching for many of those years. She instructs Paramedic, BTLS, PLS, ACLS, PALS and all alphabet soup courses

Computer Canvas

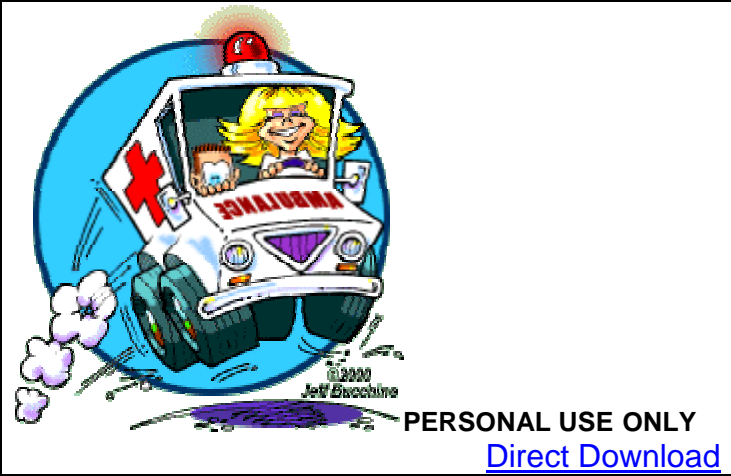
[Extrication Medical Station](http://www.defrance.org/extrication/extrication_medical_station.htm)- A collaborative effort between Extrication.com and the EMS House of DeFrance took place this month. We put in my meager talents with web work, my medical side of 'stuff' and my ignorance about extrication (in this case a plus). We added the extensive knowledge about airbags, other vehicle safety features and the extrication technique and skills of Ron Shaw (and his cohorts) at Extrication.com. What we came up with is an educational, serious (yet fun) learning (yet enjoyable) not selling anything-free gift give away (to draw in the greedy) site that will blow your socks off with the force of an airbag. (No, not Shockwave for pete's sake- its all about CONTENT folks!) I won't tell you anymore, because of course we want you to be curious enough to visit! http://www.defrance.org/extrication/extrication_medical_station.htm



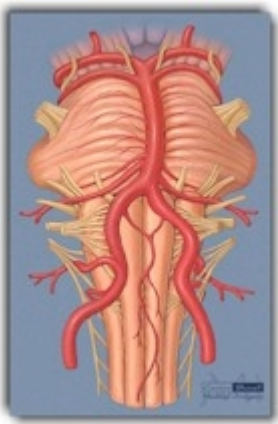
PPPC is being replaced by PEPP (Pediatric Education for Prehospital Providers) which is a course developed by the American Academy of Pediatrics (AAP). The new national education program is geared to help professionals better assess and manage ill or injured children in the prehospital setting. The course was rolled out in March 2000, the Texas roll out is scheduled for August 2000. For more information on the course you can go to: <http://www.aap.org/profed/nrp/peppmain.htm>

1300 Hazardous Substance Data Sheets. <http://www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm>.

Free Graphic. Jeff Bucchino , a very talented online artist, offers a free graphic when you purchase graphics from him! I asked for a female paramedic, and this is what he had drawn up. The graphic is for free use on personal pages only. Be sure to visit his site at www.wizardofdraws.com



Hip On Health" Parent Information Sheets and Mini-posters
 This a series of information sheets and mini-posters covering 65 different health topics such as hand washing, immunizations, fire safety, chicken pox, playground safety, dental health, head lice, nutrition, colds and sniffles, and more! Each health topic includes a reproducible information sheet and mini-poster. Mini-posters can be posted in the child care settings and the information sheets can be sent home to the parents. Available in both English and Spanish! Order both sets to meet the needs of parents and staff. Check out the Healthy Child Care Website at: <http://www.healthychild.net/HIP.html>



Head Trauma like you have never seen before. ! New materials have been added to EMS Educational Resources since the last TOES issue
 Featured Download- One is a very smooth presentation by one of our strongest supporter of the instructors site.
 Bystander Care- donated by Harvey Conner in Oklahoma. A provider course with 35 slides/overheads for the bystander, from recognition of an emergency to what to do. A small but power packed presentation!
 We also have a CPR chart to download made by Faith Harper.
 There is also a new Question of the Month , Featured Article, sounds, graphics and a list of the TOP 10 downloads. Check it out! [EMS Educational Resources](http://www.defrance.org/EMSER/EMSEducationalResources.htm)
<http://www.defrance.org/EMSER/EMSEducationalResources.htm>

From the Bowels Of Cyberspace
random and/or interesting things I run across or get in my email

Ok... we have been very professional about this topic, but...
 Last night, I saw the new Bayer Aspirin TV advertisement. This time, two people are playing tennis, and one of them keels over from an apparent cardiac arrest. His opponent whips out her cell phone (apparently to call 911), then gets a bottle of Bayer.
 By the time the rescue shows up, he is sitting up, conscious, alert and aware.
 To heck with PAD and even having paramedics, let's start PAA--Public Access Aspirination--it's cheap, easily carried, and you don't need any doctor or complex training.

I am pretty young, but had cardiac related illness come on suddenly, and I passed out in the grocery store. You would not believe what the lay people (even the Pharmacist who I am guessing should have some medical know-how) tried to do to me....including sitting me up, trying to force feed me

orange juice while unconscious (assuming sugar related problem) and pouring cold water on my neck. Who was it who said basic first aid is common sense?

"I didn't fail the test, I just found 100 ways to do it wrong." --Benjamin Franklin

They kept asking- Why is a ECG monitor included on the HeartStream Forerunner/HeartStart AED?

So he answered- So you can tell what kind of "dead" the patient is in:

- a) Dead with a rhythmic, organized squiggly line
- b) Dead with a funky, patternless squiggly line
- c) Dead with the flat line with no squiggles at all

John Mateus (Who has been teaching lay people for far too long...)

In a training scenario, I recently told the examiner that a pt. had a GCS of 16 or 17. That hasn't been my worse slip up, and I don't mind 'cos it was in training. Another time I was handing over a pt. and said "This is Mrs. Smith, she's hurt her left leg elbow". Blippie

Try this quiz.

- * Name the ten wealthiest people in the world.
- * Name the last ten Heisman trophy winners.
- * Name the last ten winners of the Miss America contest.
- * Name eight people who have won the Nobel or Pulitzer prize.
- * How about the last ten Academy Award winners for best picture or
- * The last decade's worth of World Series winners?

How did you do? I didn't do well either. With the exception of you trivia hounds, none of us remember the headliners of yesterday too well. Surprising how quickly we forget, isn't it? And what I've mentioned above are no second-rate achievements. These are the best in their fields. But the applause dies. Awards tarnish. Achievements are forgotten. Accolades and certificates are buried with their owners.

Here's another quiz. See how you do on this one:

- * Think of three people you enjoy spending time with.
- * Name ten people who have taught you something worthwhile.
- * Name five friends who have helped you in a difficult time.
- * List a few teachers who have aided your journey through school.
- * Name half-a-dozen heroes whose stories have inspired you.

Easier? It was for me, too. The lesson? The people who make a difference are not the ones with the credentials, but the ones with the concern."

---Author Unknown---

"People don't care how much you know until they know how much you care!" *from Bill Kanoff*

I find it curious that the EMS community supports in unison the dire need for science, data, empirical evaluation and so forth, yet as soon as "science" comes along comes along that questions a procedure (i.e., pediatric intubation) there is a flood of anecdotal reasons why the science is wrong. The advance of our discipline will always be hampered by this type of reaction as it gives the perception that the value of our practice is measured not by what patient benefit can be demonstrated but by "how big the drug box is" (adjunct envy?). Michael Frenn

For what is French physician Rene Theophile Hyacinthe Laennec best remembered?

See the answer at the end of this issue

Stuff That Works

Teaching Tricks

** Include animal slides in your slide show -see an animal make the noise- great informal "bore breaker"

** I always give someone a "big word whistle" The layman in the class who has never done CPR, doesn't watch Trauma life in the ER, or care to ever ride on an ambulance gets the whistle. Big word (like "MI") They blow the whistle. Keeps me basic and never allows me to be presumptuous

** Question Cow bell... during lecture, video, slides, etc, If a potential test question is mentioned, the bell mysteriously rings! (wouldn't want to give the test away, just trying to focus their attention on the really important things!)

** Desperate measure, but it's been done... LIP Sync to one of the coolest EMS tapes I have. Come off of break with it blasting and barge into the room. Class sits up, that's for sure! Favorite song "I've got the cyanotic blues I'm running out of O2s in my blood..."

** Hung rescuci-Annie from the bathroom stall during the last break complete with suicide note. (She hung herself - something about being insulted in a chat room forum, I think..) Anyway, one lucky winner "found" her as she tried to catch a quick bathroom break before running to the car after I let class out 20 minutes "early". Had to call in her friends to help her and they quickly realized they were set up for one final amazing scenario. You can do it in the parking lot, too.

I know- I'm discrediting myself as a teacher, huh? But I believe it should be fun, experiential, and most importantly, memorable. Give it a go...

Dawn Rogers - VA EMTC & AHA BTLIS-Inst

We may resuscitate and we may revive, but we ain't never RESURRECTED!

IV Training for Intermediates - How to Stick It To 'EM!

By K.P. (Coolidge) Rickey

I recently encountered a question on an Internet Group by another Instructor looking for new ideas about how to spice up their IV Training in Intermediate Courses. What follows is an excerpt of my answer.

As I said, the question regarded how to change the same old, everyday blah - blah - blah in IV training. Having had the benefit of learning from some great Preceptors and Instructors, I have shamelessly stolen a couple of their ideas, and developed some of my own, with excellent results. Remember, however, your Medical Director needs to buy into this stuff and students should never be coerced into cannulating themselves..

Number one and perhaps the most controversial thing (again, with the blessing of your Medical Director) is asking the students to stick themselves BEFORE they stick anyone else. We do not make it mandatory, but have only had one decline in 5 years. Using a 24 g catheter, ask them to self - cannulate in "Interns" (high) or one of the other good size veins.

This gives the student an idea what it feels like if they've never had one and gets them over the fear of "hurting" a patient, which I find seems to be the top concern for Intermediate candidates. We are very careful to monitor site choice to avoid nerve damage/valves and we get good feedback on Course Evals regarding this - all say it helped them immensely on the

psychological front (credit for this goes to D.T., MY instructor from years ago.....).

Also (and not necessarily in order), while I am sure others do similar things, here are OUR tricks:

1/ Turn off the lights and make students use flashlights with near dead batteries or smear vaseline over protective glasses to blurr vision and simulate low light conditions.

2/ Stretch tightly woven cloth (light denim, polished cotton) over mannequin arms and *make* students palpate rather than subconsciously visualize, then cannulate through the "tough skin". Also, take the tubes out of the tracks inside the arms and go get really SOFT replacement tubing that will stretch and/or flatten without back pressure from you . Or, put the skin back on with smeared petroleum or water based jelly, so the veins will crimp and slide - again, don't anchor the tubes back into all the tracks). Students not remembering to do so are quite surprised when the veins won't hold still!

3/ Put your Crash mannequin in a vehicle (if you don't have one, duct tape a mannequin arm to the torso of a CPR mannequin and put a T-shirt on it). Have the other students rock the vehicle a little to simulate extrication proceedings and make the student start the lines in full turn out gear, helmet, etc. Oh yeah...put the blanket over their head and block light, make lots of noise and have another student pretend to be the patient *making* that noise. <G>

4/ Put arms under furniture to simulate entrapment...have another student lying on the other side of whatever it is and jerk the arm around as if in pain.



5/ Practice mannequin and then live sticks in the back of a moving rig/ambulance. The live sticks need to be carefully supervised and, of course, you need to find willing victims, but so far, we haven't had any problem

finding

other Medic/Intermediates that are happy to help - especially since THEY get to return the favor. No more than one attempt per "victim" arm is allowed though and we use 20 g. angio's/protective types, etc.

6/ Got to butcher and get small, cheap cuts of beef bones, particularly "knees" with a length of the femur attached (ask butcher NOT to strip all the meat/fat/blood vessels off or out) or use chicken

legs. Inject and fill vasculature with red dye/Karo Syrup (it doesn't bleed out as fast as water/dye combination). Put a piece of cheesecloth over beef and leave skin on chicken. The chicken legs can then be used to simulate IO practice on the same night, as well.

7/ When doing rig sticks on mannequins, have a "helpful" partner step on the line and rip it out.....high status patient means they HAVE to deal with it, stop the bleeding and re-cannulate. (Student who manages this with most proficiency and in least amount of time gets a gift certificate for a pizza <G>)

8/ Have a student sit in the airway seat at the patients' head and cannulate with patient's right arm bent at the elbow and hand pulled toward ear/up over their head, as opposed to straddling cot to get to right arm. Access is really easy to the largest part of the ulnar and bending the elbow acts as

another tourniquet, even in really hypovolemic patients. At first everyone thinks the line is going in backwards, until they put the arm down straight and realize it's not.

While this "trick" something I sort of developed by necessity (transporting off track at racing events in a Type II) and while last ditch, it works really well in the real world when you need dual lines ASAP. It also presents a great training challenge, integrating team work into the equation, by having two students start simultaneous lines. (In reality one would assume the airway issues are taken care of during the usually less than 30 seconds it takes to do this, so a third student is dealing with that at the same time<G>.).

Second, and definitely not something I recommend unless very proficient on mannequin and Medical Director "buys off" on it (I learned this from a couple of ParaJumpers):

Have student sit in airway seat and reverse cannulate the patient. In other words, have their "Basic" partner steady the arm from the bench seat position, place the tourniquet and cannulate the vein from the airway seat, with the catheter facing back at the student/patient's arm pit. Gives a much different perspective and builds confidence/manual dexterity.

REMINDER TO READERS: Our students are cautioned strongly that this method is **NOT RECOMMENDED** as a matter of everyday practice and should be reserved for extreme situations, such as building collapse/entrapment where you might have to hang over the edge of something from the "wrong" position or in a military evac chopper where you can't move around very easily once you're off the ground.

9/ Also, at some point give students lines that won't run for real, rather than just simulating and talking about how to trouble shoot. Crimp the lines where they can't see you do it, for instance. Also, we put previously used drip sets back in packages we've opened with an exacto knife and then reseal them with one of those hot bag sealers (like for frozen food) - once a drip line has been filled and drained, they don't like to fill very well and it takes the student some time to figure out the set isn't working properly.

We also put pinholes in the line of the set or in the IV bags at the port or open up a line port, block the inside of the line where they can't see it with a small wad of plastic wrap and reseal it. We also slow down or stop flow by injecting clear drying "hot gun" glue into the pick on the drip chamber itself.

Sometimes, we will even open a cath package, fill the flash chamber with clear glue or glue the hub down and seal it back up; or, we will take the end cap off the cath and put it back in the package without it (ever have one fall off in the middle of a stick? MESSY! LOL!).

Students either don't ever get flashback and it takes them a little time to decide the cath is faulty, or the "blood" runs all over the place. Thus students are exposed to defective materials and they have to figure out what's going on.

9/ Run scenarios where the patient refuses the IV, or Medical Direction denies the orders. Part of this is reminding students they still have to figure out how to resuscitate and stabilize conscious and appropriate patients **WITHOUT** IV's, and when it happens, as well as how to discuss the issue and get a patient to change their mind if one is absolutely necessary (in the tech's opinion) enroute. It also teaches them to remember that they should be **ASKING** the patient for permission to start a line in the first place, **TALKING** and **EXPLAINING** what's going on, and helps integrate their bedside manner with a patient into this technical skill.

10/ Last, but not least, the act of heroism on **YOUR** part <G>, if you are game! The final "exam"/mastery sign-off for my students is to stick **ME!** Also, try to get other Instructors with really dark skin or very hairy arms to donate time/arms, as well. Two things come from this -confidence on the part of the student (although intimidating to them, they invariably thanks us afterwards) and we **KNOW** they've "got" it before they leave for the big, bad world of clinicals. All of this takes some work and time, but I find it worth it, since we don't get access to cadaver labs of any kind.

As for practical labs work, our Intermediate courses require 30 mannequin sticks and 10 live sticks in course and 30 in clinical, 15 in ride time. Students are not allowed to practice cannulation of the AC until they have perfected dorsal sticks...not allowed to use "interns" unless it's given to them as a "last resort" - too easy and too close to nerves. We also encourage them to consider the brachial and saphenous when all else fails (severe injury to lower arms, or upper torso, crush/burn/amputations), as we have found in refreshers that students don't even realize they **CAN** use them, when necessary.

Students are required to hang the line/bag on every stick after the first three mannequin attempts. Gets them in the habit of doing the whole skill, not just sticking the cath in the vein. They have to think logically and in advance about setting up, etc. A minimum of 5 sticks must be on pediatric mannequin arms and we try to get them at least one live pedi in clinical. While pedi sticks are not in the NH scope of practice for Intermediates, it goes a long way towards making them comfortable with a 95 year old, 85 lb patient.

All this may sound like we are "stick" happy.....we're not. We are very careful and NO student is forced to submit their own arm -we make that very clear up front. Any student with medical problem that would make them high risk (Prednisone, pregnant, blood thinners, etc.) or whose physician asks them not to participate, is exempted without prejudice; but, it doesn't happen often. We DO, however, encourage the earlier EMS mind set - "Give a stick, Get a stick." We have found that our students have a high incidence of success later on in the field - in excess of 90% - as opposed to refresher students who report an

overall 50% success rate prior to doing refresher time with these kinds of stations.

Again, if any of you has other training tricks in the area of IV training, please share them. Questions or comments should be directed to myself personally - this Web Site is not responsible for defending the contents of this article.

Happy training!

Kat

K.P. (Coolidge) Rickey, NREMT-P: EMS I/C, AHA BCLS/ACLS/PALS I/C, PHTLS - Advanced I/C NSC - EVO and First Aid I/C, NREMT BLS and ALS Evaluator, CEO: Pre-ME&D, inc. Barnstead, NH

21 years in EMS, former Training Officer x 3 departments, and a few other alphabits <G>.

Most people know me by "KPC" - just got married a month ago. I started Pre-ME&D almost 5 years ago. We run four Basic courses, three Intermediate Courses, 10 RTP's of all flavors and multiple ACLS/CPR and PHTLS courses every year.

Who is EMS-L, and why should we care?

EMS-L is list server. If you want to peek in, or join in reasonable discussion with EMS Medical Directors, EMS Physicians, EMS Policy Makers, and others, this is the list to join. I have gotten quite an education since I joined, and have had a few of those burning questions answered. Even if you have no questions, just observing the discussions and debates and seeing the rational in progress for what is the basis of our protocols and directives is enlightening.

The NAEMSP Computer Committee started the list in Feb. 1997. That purpose is included in the charter (see below) and has not changed. The moderators have been Dr. Barry Burton and Thomas D. Scott.

The Charter:

EMS-L is a moderated mailing list for the discussion of issues related to medical direction and medical oversight of emergency medical services (EMS) as well as prehospital and out-of hospital treatment protocols. Issues related to quality improvement and EMS policy issues are also welcome.

Participants on the list include EMS Medical Directors, EMS Physicians, EMS Policy Makers from Federal, State and Local Government as well as the various national organizations, EMS managers

and EMS field personnel that have an interest in contributing to reasoned discussions of issues related to the delivery of prehospital and out-of hospital medicine.

The list is intended to foster professional level discussion and debate. The moderator reserves the right to reject submissions that are not related to the topic matter of the list, spam (commercial email), and flames (personal attacks on individuals or their positions that are not supported by reasoned arguments.) The moderator may also elect to ask authors to edit submissions for clarity.

All interested persons willing to abide by the moderation guidelines, are welcome to subscribe AND actively participate in this list. You may subscribe to the list by sending an email message to: EMS-L@listserv.ACNS.NWU.EDU

CPR Boards By Jay Wiseman

The most common type of CPR board that I've seen actually used in the field with any significant frequency is one made out of plywood and cut to fit between the gurney and its mattress. This is usually short enough so that it can be placed on the upper end of the gurney without limiting the ability to raise the head of the gurney freely.

I've used these in a whole bunch of codes. They were often combined with a towel that had been rolled up and taped. The CPR board was placed between the patient and the gurney mattress (some even had a handhold cut into the top/center of them to help this along; a nice touch) and the towel was then placed under the patient's upper shoulders to drop their head back.

There was a good deal of debate regarding whether using these made any difference, so I did an experiment. I got a recording Annie and had five different EMTs each do five minutes of CPR compressions (only) in the back of the ambulance with the ambulance stationary and the CPR board under the mattress away from the patient (the tape was running).

After a minimum of a 30-minute rest period, I then had the same five EMTs again do five minutes of CPR under the same circumstances except that the CPR board was between the patient and the mattress.

The EMTs reported that they did not notice any significant difference between the two arrangements.

Then I went home and measured the depth of compression on every single damn one of those tapes. (It took a while.) The results were interesting.

After one minute of CPR, there was very little difference, but from the two minute mark to the five minute mark the "with board" compressions were significantly better than the "without a board" compressions. Most interestingly, at the five-minute mark (where we stopped), most "with the board" compressions were at least 1&1/2 inches deep while the "without a board" compressions were about 20% shallower and most were not at least 1&1/2" deep.

Thus, at least in the study that I did, use of a CPR board resulted in significantly deeper compressions being done, and that difference became more obvious with time.

New Stroke Screening Tool Proves Accurate in Study Helps Emergency Medical Personnel Quickly Detect Stroke Victims

A study by the UCLA Stroke Center says that a new tool designed to help emergency medical services personnel accurately detect potential stroke patients in the field has proved 91 percent accurate. The UCLA researchers encourage other U.S. cities to adopt and use this new stroke survey to help save more lives.

The study, published in the January issue of the journal Stroke, tested a one-page exam form designed to enhance the ability of emergency medical technicians and paramedics to rapidly identify acute stroke patients when delivering emergency services in the field. Read the study!

For what is French physician Rene Theophile Hyacinthe Laennec best remembered?

Dr. Laennec -- born on this date in 1781 -- invented the stethoscope. He is known as the "father of chest medicine."

Do your students GROK? Or are they TABULA RASA?

To grok something is to understand it so profoundly that its nature is intuitively clear to you.

Tabula rasa describes anything, especially the mind, that has not yet been formed or developed. It also describes getting a fresh start or a new opportunity.

That's all for this issue. Buckle up and have a mind engaging day.



Valerie DeFrance, Editor
28204 Hope Hwy
Hope, Alaska 99605
(907) 782-3174
v.defrance@worldnet.att.net

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