EMS Subspecialty Certification
Review Course

Challenges in Geriatric Patient Care

1.4.6 Geriatric Issues

Version: 2017

Learning Objectives

Upon the completion of this program participants will be able to:

• Understand the various challenges presented to EMS by geriatric patients
• Describe medical considerations unique to the aging
• Discuss the issue of “polypharmacy” in the elderly
• Relate concerns regarding social concerns in the geriatric population

Geriatric Patients and EMS Systems

• Geriatric Patients
  – Fastest growing segment of the U.S. population
  – EMS transport rate for the ≥65 age group is >4 times the younger population
  – By 2030 older adults will comprise over half of all EMS transports
The Aging Patient

- Geriatric Patients
  - Increased risk of dementia and cancer
  - Diminished physiologic capacity with significantly less functional organ reserve
  - Thinner skin = more trauma and/or infection
  - Risk of fractures and less flexible spine
  - Hearing loss and reduced vision
  - Greater difficulty in temperature regulation
  - Depression is common: Patient Health Questionnaire 2

Common Changes in Normal Aging:
1. Skin is thinner and susceptible to trauma.
2. Greater difficulty in temperature regulation.
3. Risk of fractures from bone loss.
4. Reduced spine flexibility and loss of height.
5. Reduced cardiac and pulmonary reserve.
6. Reduced renal function and drug clearance.
7. Decline in hormone levels.
8. Reduced vision from cataracts.
9. Hearing loss from noise exposure.

Assessment of the Geriatric Patient

- Initial steps are unchanged
  - Primary Survey, including vital signs
  - Any immediate interventions should be completed
  - History of present illness, including medications
  - Secondary Survey
- Speak to the patient!
- Environmental assessment
- Social history
- Search for cognitive impairment
1. The initial steps in the assessment of the geriatric patient are unchanged. A primary survey should be completed, evaluating the patient’s ABCs. Vital signs should be obtained and any immediate interventions necessary should be completed.

2. A full history should be taken, including the symptoms the patient has experienced, allergies, medications (including over-the-counter and herbal medications), and past medical history.

3. A full examination should be completed.

4. Although not traditionally considered, an environmental assessment should also be completed because the environment can provide clues as to the extent of the disease or the precipitating factors for disease.

5. Finally, a social history should be obtained because psychosocial issues could either be the primary reason for the request for assistance, or could precipitate or exacerbate medical issues.

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**Assessment of the Geriatric Patient**

**TABLE 41-2**

| Six-Item Screen for Cognitive Impairment |
| 1. Ask the patient to repeat three words after you: apple, table, and pen. If not repeated correctly, the test cannot continue. |
| 2. What year is this? |
| 3. What is the day of the week? |
| 4. What were the three objects I asked you to remember? |
| 5. apple |
| 6. table |
| 7. pen |

One point for each question answered correctly. Three or more errors indicate possible dementia.

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**Trauma in the Geriatric Patient**

- Falls are a leading and preventable cause of trauma in the elderly
  - 30% fall annually and 50% repeatedly
  - 25% suffer serious injury
    - Fractures, joint injuries, and intracranial injuries are common
    - Many suffer emotional consequences
- Cost of hospital care due to falls approaches $20 billion annually in the U.S.
Social Issues in Geriatric Patients

• Medication and Alcohol Abuse
  – Alcoholism and prescription drug abuse are common in the geriatric population
  – Increased risk for falls and fractures
• Elder Abuse and Mistreatment
• Caregiver Distress

Substance abuse is actually quite common in the geriatric population. The Substance Abuse and Mental Health Services Administration has estimated that over 17% of adults aged 60 and older misuse alcohol and prescription drugs.

2. This can result in frequent ED visits and hospitalizations, as well as an increased risk for falls and hip fractures.

3. Older adults are often resistant to enrollment in traditional alcohol and drug treatment programs.

4. Because older adult medication abusers tend to be more socially isolated and less public regarding their addiction and related problems, EMS professionals may be the first to truly identify the problem when they enter the home.
Social Issues in Geriatric Patients

• Elder Abuse and Mistreatment:
  – A common problem, with millions of cases reported
  – Includes financial, psychological, physical, and sexual abuse
  – Social isolation, dementia, and shared living are risk factors
  – EMS agencies must have a reporting protocol

1. Elder abuse and mistreatment are common, with studies reporting that 1 to 2 million older adults have been injured, exploited, or mistreated.
2. Elder mistreatment includes financial, psychological, physical, and sexual abuse.
3. EMS professionals need training on the risk factors for mistreatment and ways to identify potential abuse.
4. A number of risk factors have been validated, including social isolation of the older adult, dementia, and a shared living arrangement with the abuser.
5. Characteristics of the abuser have been identified that include mental illness, alcohol abuse, and dependency on the older adult.
6. Each EMS agency should have an established protocol for reporting suspected cases of abuse. This is particularly important if EMS providers are mandated by state law to report cases of elder abuse to either a central state investigative agency or a local agency.

• Caregiver Distress
  – Family and friends often provide care
  – The patient may have medical, psychological, or behavioral problems
  – May not be sufficient social support
  – EMS must observe the family as well as the patient
  – Caregiver may feel a personal sense of failure
1. Family members and friends may provide the majority of care for older adults with medical, psychological, or behavioral problems. Over time, this can be exhausting and lead to significant stress if the family does not have sufficient social supports or opportunities for periods of respite.

2. When a request for assistance for elderly patients is made, EMS professionals should pay attention to the family members as well as the primary patient. If the primary caregiver seems to be stressed, overwhelmed, or unable to manage the patient, then he or she may also be in need of assistance.

3. A caregiver may also feel a personal sense of failure if a loved one becomes ill under their care, adding to the perceived burden, and the caregiver may be seeking reassurance and support.

4. The EMS professional can help address caregiver needs by reporting information to the ED providers, calling family or friends to provide further support, and by being a calm and professional presence during the care of the patient.

Special Considerations

- Kyphosis and padding of backboards
- DNR Status
- Blankets for warming
- Patient refusal
- Nursing home issues
- Healthcare “fragmentation” preventing EMS from confirming public health needs for the elderly.

Research in EMS Geriatrics

- Lack of researchers
- Lack of funding
- Lack of sophisticated information systems
- Ethical concerns
- Must identify proper diagnostic and therapeutic interventions to the elderly
  - Trauma, sepsis, cardiac arrest, ACS
- Geriatric Centers of Excellence in the future?
Take-Home Points

• The geriatric population is rapidly increasing and presents a high utilization of EMS responses
• The physiology of the geriatric patient presents significant risk for increased injury and illness
• Falls are a common risk of serious injury
• The issue of “polypharmacy” in the elderly represents an increased likelihood of medications reactions
• EMS providers must maintain social considerations in the elderly population

Case Example

• Paramedics are called to the home of an elderly man who the family says is now very confused
  – Assessment reveals that the patient is alert and oriented only to his own name, and has a mild tachycardia.
  – The patient has been unable to urinate for several hours.
• The history reveals that the patient went to a physician that day due to a “cold”, and a new prescription was given
• What might be the source of the sudden confusion, tachycardia, and urinary retention?