**EMS CASE STUDIES-ELDERLY ABDOMINAL TRAUMA**

Scenario: An elderly lady bends over to pick up her 5-year-old granddaughter. The child accidentally kicks her in the abdomen. She presents to the EMS crew with “the worst stomach pain she has ever felt” the pain is in the vicinity of the umbilicus. All vital signs are stable, and the crew performs a thorough assessment. They examine her abdomen and find nothing. There is no bruising. The belly is soft with no masses. So off the hospital they go.

Upon arrival, the physician examines the patient, and the recorded vital signs are pulse 80, BP 150/90, respiration 18. The physician essentially finds the same thing as the prehospital practitioners. The woman's belly hurts, but she has a soft abdomen with no rebound, rigidity or guarding. In this scenario, the patient is then evaluated by the trauma surgeons, admitted and scheduled for a see T scan the next day period during the night the patient suffers a cardiorespiratory arrest and is pronounced 40 minutes later period sad story, but what is there for us to garner here?

Diminished ability to raise the heart rate. This means that you may not see the tachycardia you would expect to see in the younger adult. In addition, the oldster may be taking medications that will further reduce the ability to increase the heart rate in response to stress such as beta or calcium channel blocking agents or digitalis.

Reduced ability to vasoconstrict. This means that we may not see the pale and cool skin we expect to see in early or compensated shock. This and the inability to raise the heart rate basically removed two of the parameters in our assessment of shock.

Abdominal injuries in the elderly are often occult. Why is this the case? As we age, our perception of pain begins to decrease. This can be due to mental or hearing difficulties, increasing pain tolerance or the inability of the patient to precisely locate the painful area. These are the keys for our understanding of this patient's demise. An autopsy finds that the patient had a ruptured intestine, profuse internal bleeding and diffuse peritonitis due to fecal matter throughout her abdominal cavity, which caused her death. What would have happened if this patient had been 40 years old? She would have been in the OR much quicker. Why? Because the younger patient would probably have presented with the vaunted board like abdomen and rapid heart rate, necessitating rapid surgical exploration.

It is for these reasons and others that the elderly have nearly 5 times the death rate for abdominal trauma than other age groups because:

 the elderly may not respond to abdominal trauma the way we expect.

 The signs of trauma may be less obvious.

Older patients are less tolerant of surgery to begin with. They tend to be very susceptible to postop lung infections and problems.

Older patients with abdominal trauma require a higher degree of suspicion.

Being suspicious is at the very core of the prehospital being. Isn't that what we're here for? Our job is to see beyond the obvious and then entertain our suspicions. When we see a 50-year-old with epigastric pain, we think beyond the claim of indigestion. The same is true with trauma. Look at the mechanism of injury. If it's possible that something is injured, let us proceed as though it is. Make sure we think of horses when we hear hoof beats, not zebras.

Summary Questions: Answer in your own words, do not copy paste from above. (type your responses)

1. Why might an elderly trauma patient not exhibit bruising as rapidly as other patients?
2. What classification of medications can keep the heart rate from accelerating in the elderly patient in shock?
3. Provide the generic and brand name of 3 popular medications from the drug classification discussed in question 2.
4. Describe abdominal assessment, discuss the presentation of guarding, rebound and rigidity.