DR. WITHERSPOON
CHIEF OF STAFF

by J. M. MacDavid M.D.

The ER Crew

A nursing home resident became ill and was rushed to the emergency room of a nearby hospital. He had long suffered from liver failure and had barely survived numerous bouts of congestive heart failure.

Upon arrival at the hospital, he went into complete cardiac arrest.

The ER staff immediately initiated the full cardiopulmonary resuscitation (CPR) protocol. Chest compressions were begun, he was placed on oxygen, and they prepared to cardiovert his heart. They opened his shirt, placed the paddles on his chest and gave the "all clear."

When the shock was delivered, the patient burst into flames! The staff had to sprint back from his stretcher to avoid the fire. An alarm went out and the fire department raced to the scene. After the fire was out, they did not attempt to revive the patient and pronounced him dead.

They assumed the air under the patient's clothing somehow became oxygenrich. Perhaps they blew oxygen beneath his shirt collar with the face mask, or a line leaked oxygen beneath his clothing. When the shock was given, a spark caused the ignition.

The patient's family sued, blaming the hospital for the fire. They were upset with the staff for not trying to revive him after the fire was put out. An expert witness for the hospital testified the

patient was in such poor medical condition when he arrived, it was unlikely he would have survived anyway.

Interestingly, the lawyer for the hospital also argued the "Good Samaritan" law in favor of the treating physicians. The "Good Samaritan" law for the state where the incident occurred exempts from lawsuit health care providers who treat patients under extraordinary circumstances, such as earthquake, flood or fire.

The patient *was* on fire.

It's a bit unclear how that figured into the case.

Dr. Witherspoon says:

Good night! They tried to revive the poor fellow and almost burned down the ER.

It sounds like they were doing a fairly good job right up until they fired the paddles. According to the protocol, you're supposed to disconnect the oxygen and remove the source at least a meter away before giving the shock. There should be no alcohol residue on the skin. There was a lot of discussion about this while they were reconstructing events and I'm not sure they were able to demonstrate faulty technique.

Energy levels delivered during cardioversion are lower now than they used to be and there is now a "hands free" option with sticky pads applied in the same positions as the paddles. For these reasons, were the patient treated today, most likely there would not have been a fire. It's a rare occurrence and the sticky pads are supposed to make it safer, but there is one report of the pads themselves igniting for reasons that remain unknown.

Not trying to revive him after the fire was put out may seem insensitive, but that was likely appropriate. Ten minutes of cardiac arrest at room temperature without resuscitative efforts is generally considered the cutoff for brain death, but there are several reasons for extending that time frame. Many patients who suffered immersion in icy water or were found in arrest in frigid winter weather have been successfully resuscitated after a much later time frame. Attempted CPR and other factors may push the envelope on trying to keep a patient alive.

In this case, I doubt if they got the fire out and the decks cleared for action in time for a successful resuscitation. My deepest sympathies go out to the family, but further efforts would likely have been fruitless.

The gentleman may have wished to consider a living will with a DNR (do not resuscitate) order that gives physicians instructions as to how far to go with attempts at revival. If you don't want the counter shocks applied or the breathing tube down your throat, they can have that information beforehand. This offers ease of mind to elderly or terminally ill patients concerned about suffering unnecessary pain should they become hospitalized in extremis. Based on the patient's past medical history, that probably would have been in his best interest.

Careful with the oxygen folks, it's dangerous stuff.

And don't expect the "Good Samaritan" law to bail you out if you start a fire with it.