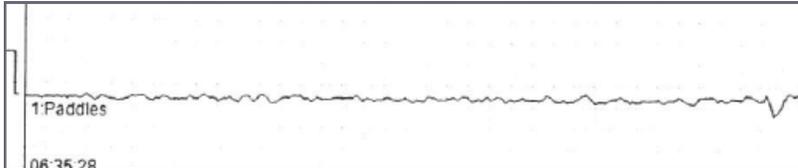




SOUTHWEST ONTARIO REGIONAL BASE HOSPITAL PROGRAM

PARAMEDIC SAFETY PAUSE

COLLABORATIVE CULTURE OF SAFETY



FINE VF: Over the last year, SWORBHP noticed an auditing trend where a discrepancy exists between what was deemed to be asystole on the cardiac monitor screen by the treating paramedic and what was recorded by the cardiac monitors (known as a pco file) upon review of the call.

By utilizing a “Just Culture” approach to this problem, SWORBHP held multiple investigations to learn more about the system and human factors leading to these potential variances. Paramedics were confident that they were observing asystole and involved partners supported this interpretation. Upon meeting with those involved, it became apparent that this was not reflective of a knowledge issue. All were clearly able to discern asystole from vfib. We hypothesized that perhaps it was an issue of cognitive loading and proceeded to test this hypothesis through simulation scenarios.

We concluded that excessive cognitive loading was not the issue as those involved performed spectacularly while managing complex simulation scenarios. We investigated deeper into the systems factors that may be contributing to this variance. We began to appreciate that what was appearing on the cardiac monitor may not have been a reflection of what the true rhythm was for multiple reasons.

Through discussions with those involved in these cases, we were able to learn where the “system” issue occurred (ie. a difference between what was presented on the cardiac monitor compared with the rhythm as documented in the pco file). As a result, a slight practice change is necessary in order to help discern fine VF from asystole.

PRACTICE CHANGES

1. Ensure ECG cable and electrodes are being used for monitoring (attached leads in cardiac arrest as soon as feasible).

WHY? ECG leads will provide better detail in attempting to discern the finer waveform of VF than the defib pads. In addition to having greater bandwidth (more precise detail) than defib pads. They also allow for the next troubleshooting step.

2. When in doubt, cycle through multiple ECG leads to confirm rhythm.

WHY? The vector of current may only be discernible through one lead. By increasing the number of leads viewed, the chance of picking up on fine VF increases.

3. Confirm findings with printed strip if necessary.

WHY? This is the most important step. The printed strip is considered “diagnostic” and is what we see on the pco file. It will be able to pick up cases of fine VF that are not translated onto the screen. During pulse checks, print off a strip if the patient appears to be in asystole to ensure that there is not an underlying fine VF. This strip can be viewed once back on the chest and a decision can be made whether the patient is actually in fine VF versus what may appear to be asystole on the screen.

SWORBHP continues to emphasize the value of minimizing time off of the chest. If experiencing significant difficulty in determining the rhythm in a timely fashion, resume CPR and analyse the printed strip. As we continue to partner with other Base Hospitals, services, and vendors, we hope to continue to learn more about this issue and evolve practice as necessary. SWORBHP will continue to provide updates as we gain more information.

For SWORBHP services that utilize SAED, please continue your current practice.