A Modified Advanced Cardiac Life Support Algorithm

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Abstract
Advanced cardiac life support (ACLS) has been made with many algorithms. We are suggesting a simple combined one as a time frame expected to attend is minutes and maintaining coherent neurological status is crucial.

Keywords
Advanced cardiac life support, Algorithms, Tachyarrhythmia, Bradyarrhythmia, Shock

Key Messages
• A time frame approach is expected in cardiac arrest and minutes count to maintain a coherent neurological status.
• A joined Tachy/Brady algorithm is feasible.
• A simple combined algorithm for cardiac life support is presented.

Advanced cardiac life support (ACLS) has been made simpler, shorter and with many algorithms. Despite that, many candidates still have a fear of taking the course.

In institutions with multiple nationalities, the way in which ACLS is taught might vary and the time frame expected to attend the important minutes in saving a life and maintaining coherent neurological status might been delayed.

We have come up with the attached algorithm (Figure 1) to unify the approach, make it faster and more effective. We hope it will result in us saving more lives. We have divided the algorithm into two halves: Living and dead.

Life will usually emphasize treatment of tachy/brady, and the concept of assessing stability, with expert consultation in the case of a stable patient, while dead will emphasize treatment as shockable or non-shockable to prompt early shock and the consideration of differential diagnoses [1,2].

We focused on utilizing the alphabetic ABCDE or once EMS. We also utilize a 5-step approach to recognize the rhythms.
**ACLs Summary**

**Initial Impression C B C**

**Responsiveness**

- Yes (Living)
- No

**Primary Assessment**

A. Airway Patent
B. Give Oxygen as Needed
C. Cannula, Monitor
D. Disability
E. Exposure

**Monitor**

- Tachy/Brady
- Regular/Irregular
- QRS Wide/Narrow
- P Present/Absent
- Relation of P to QRS

**Stability**

- Symptoms
- Signs
  - *Dizziness*
  - *CHEST PAIN*
  - *SBR*
  - *↓ BP*
  - *↓ HF*

**Secondary Assessment**

- Sample History/H’s & T’s

**Tachy!**

**Brady**

**CABD**

A. Airway Patent: Add OPA/NPA
B. Give Oxygen, Bag Mask Ventilation, Intubate by Expert if Needed
C. Effective Chest Compression, Cannula, Monitor, Code Blue, Drug: Epinephrine
D. Disability
E. Exposure

**Second D/C Shock**

**CPR**

**Post Resc Care**

1. Appropriate Invest
2. BP & Good Saturation
3. Consider TTM

**References**
