

Moderate sea states do not influence the application of an AED in rigid inflatable rescue boats

Wiebe de Vries MSc RN

Professor Joost Bierens MD PhD MCDM

Martijn Maas MSc

29 Sep 2007 - 10:00-10:20



www.doczero.nl

Research questions

- ◆ Are AEDs robust enough?
- ◆ Do AEDs recognize artefacts caused by boat movement?
- ◆ Do AEDs fit a quality audit system?



Wiebe de Vries

General design



- ◆ Six AEDs
- ◆ Three types of RIBs
- ◆ Connected to volunteers
- ◆ Connected to a ALS-manikin
- ◆ Data download with a laptop computer

Wiebe de Vries

Environment

- ◆ In a harbour
- ◆ At sea
 - ◆ 45°
 - ◆ 90°
 - ◆ 180°



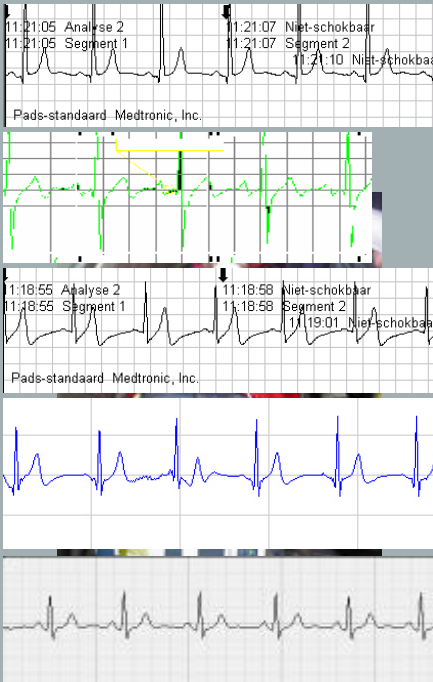
Wiebe de Vries

Are AEDs robust enough?

- ◆ At one of the RIBs each AED became wet; no AED had a technical problem



LifePak CR-plus robust enough?



- ◆ Cardiac Science G3 volunteer:
a regular sinus rhythm
LifePak 500 DPS

Defibtech Lifeline

Laerdal Heartstart FR2

Wiebe de Vries

Are AEDs robust enough?



- ◆ There were differences in the time between first analysis and the shock.
- ◆ Most voice prompts were 'difficult to understand'.

Wiebe de Vries

Do AEDs recognize artefacts caused by boat movement?

- ◆ Connected to a manikin in VF:
- ◆ each AED was able to recognise VF and to provide a shock



Wiebe de Vries

Do AEDs fit a quality audit system?



- ◆ Downloading of data was possible
- ◆ However:
we had a problem with the infrared connection

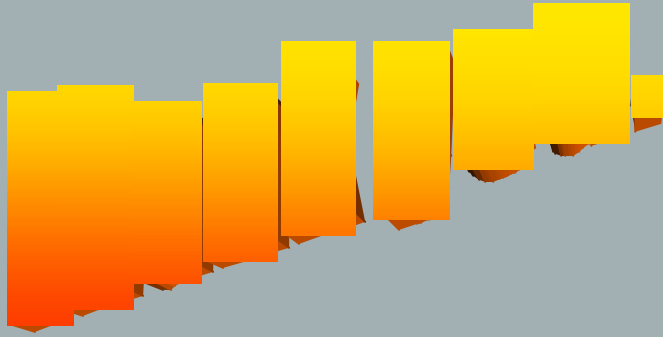
Wiebe de Vries

Suggestions

- ◆ The use of AEDs on RIBs is possible and effective over calm water.
- ◆ The AED should have a screen and features to easily download data.
- ◆ AEDs have to fit in the Chain of Survival.



Wiebe de Vries



www.wiebedevries.eu