Reviewer's report

Title: Wearable defibrillator use In heart Failure (WIF): Results of a prospective registry

Version: 3 Date: 19 September 2012

Reviewer: Osama Soliman

Reviewer's report:

I would like to congratulate the author on this work. The topic of the manuscript is interesting and clinically relevant.

I have the following comments:

Major Compulsory Revisions

1. There is no need for clinical trial to test if defibrillator is effective; however we need to assess two items cost-effectiveness and quality of life related to device use. In this prospective registry no appropriate or inappropriate shocks were reported. However, I would like the authors to elaborate on the cost-effectiveness of the life vest, particularly in patients who received ICD at the end. Furthermore, I believe a continuation of such registry for longer period could possibly shed light into cost-effectiveness and quality of life.

2. On the results section under the header “Improved LVEF during WCD use,” the authors mentioned “New York Heart Association class also improved by -0.5±1.0 points since initial enrollment” was it a deterioration in NYHA class?

3. During follow-up, six patients (7.3%) died from unknown causes and 4 were lost to study follow-up for unknown reasons also. This issue should not only be acknowledged as important limitation of the study but also elaborated on.

4. Did any of the patients who lost during follow-up have active pacemaker? What about potential interaction between pacemaker and life vest?

5. Improved LVEF is very interesting finding, I have some comments on that:
   a. I prefer to use specific terms such as LV ejection fraction instead of LV systolic function in the whole manuscript. The two terms are not the same.
   b. What does an improved EF (31 out of 34) mean? Does it mean improved from category into another? e.g moderately reduced EF into normal EF based on ASE recommendations for chamber quantifications. It could be helpful to add the percentage of patients who changed EF category.
   c. As seen on Figure 2, about 10 patients had LVEF > 50% at the end of follow-up. please confirm

Minor Essential Revisions

6. There is typo on page 10, second paragraph of the discussion section.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests'