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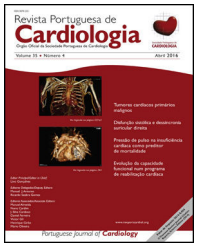

LETTER TO THE EDITOR

Surgical aortic valve replacement improves quality of life

A substituição cirúrgica da válvula aórtica melhora a qualidade de vida

To the Editor:

We read with great interest the recent paper by Bento et al.[1] entitled ''Surgical aortic valve replacement improves the quality of life of octogenarians with severe aortic stenosis''. In this retrospective study the authors investigated the quality of life of aortic stenosis (AS) patients who underwent isolated surgical aortic valve replacement (SAVR) at baseline and three, six, and 12 months after surgery. They compared the eight domains and two components of the Medical Outcomes Study Short Form (SF-36) between baseline and postoperative time-points using one-way analysis of variance (ANOVA). One-way ANOVA is used to compare means of continuous numerical variables between two or more independent groups.[2] The authors compared some numerical variables in one sample of patients between four time-points including baseline and three, six and 12 months after surgery; therefore, their comparisons are completely dependent. Repeated measures ANOVA and the Friedman test are used to compare continuous numerical variables between two or more dependent groups similar to the above-mentioned study, in which comparisons were performed on one sample of patients.

Therefore, the authors should have initially analyzed the distribution of numerical variables and then used repeated measures ANOVA or the Friedman test to compare these variables in their single sample of patients between four time-points of measurements. Furthermore, they should have used the paired t test or the Wilcoxon signed rank test for comparison of numerical variables between each two time-points of measurement.

Taken together, we believe that this valuable study needs appropriate statistical tests to be used as a citable document.

Conflicts of interest

The authors have no conflicts of interest to declare.

References

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