

with medical treatment alone therefore seems the most appropriate management of patients with SCAD who become asymptomatic with medical treatment and who do not show any evidence of ongoing ischaemia or haemodynamic instability. Revascularisation seems only warranted in cases of recurrent anginal symptoms and should be considered when, after prolonged medical treatment, a pronounced dissection persists in a major coronary artery causing a marked and extensive inducible myocardial ischaemia upon myocardial perfusion imaging.

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## Short-term effects of transcatheter aortic valve implantation

**To the Editor** I read with interest the paper by Gotzmann *et al* in *Heart*<sup>1</sup> demonstrating some very important differences after transcatheter aortic valve implantation

(TAVI), particularly improvements in exercise tolerance and quality of life. I do have some reservations, however, on the statistical methodology employed. The study involved a cohort of 44 patients, assessed before and after TAVI, so clearly paired statistical tests are appropriate. However, the group chose to use the unpaired Student *t*, Mann–Whitney *U* and  $\chi^2$  tests, instead of the correct (and more powerful) paired Student *t*, Wilcoxon and McNemar tests. Use of these tests would very probably have considerably increased the significance of observed differences.

On the other hand, the paper contains at least 16 independent comparative tests, and no allowance has been made for multiple comparison. Using the crudest method of correction (the Bonferroni correction), they should have considered tests to be significant not at  $p < 0.05$ , but at  $p < 0.003$ , which would render some of the apparent significant differences to be not significant (such as LVEF and BNP).

I would recommend that the authors re-examine their stats before making the conclusions about BNP stated in the paper; it may turn out that (using the Wilcoxon test) BNP is in fact significantly reduced after TAVI in this group of patients.

#### David Cunningham

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1. **Gotzmann M,** Hehen T, Germing A, *et al.* Short-term effects of transcatheter aortic valve implantation on neurohormonal activation, quality of life and 6-minute walk test in severe and symptomatic aortic stenosis. *Heart* 2010;**96**:1102–6.

**The Authors' reply** We gratefully acknowledge receipt of the letter by David Cunningham.<sup>1</sup> According to the suggestions of Dr Cunningham, we re-calculated our results<sup>2</sup> and used the appropriate statistic (paired Student *t*, Wilcoxon and McNemar tests): still, quality of life (MLHFQ Score) and distance in the 6 min walk test (m) significantly improved after transcatheter aortic valve implantation (both  $p < 0.001$ ). In addition, levels of B-type natriuretic peptide decreased ( $p = 0.013$ ).

Furthermore, as the author suggests, Bonferroni correction is a suitable method to make allowance for multiple comparisons. However, our study contains only three primary study parameters (quality of

life (QLHFQ Score), distance in the 6 min walk test and level of B-type natriuretic peptide), the other 13 independent comparative tests are explorative tests. Therefore, using the Bonferroni correction for three comparative tests, we considered tests to be significant not at  $p < 0.003$ , but at  $p < 0.016$ .

Considering all aspects, we believe that we can maintain our conclusions that transcatheter aortic valve implantation leads to a significantly clinical benefit and a reduction of neurohormonal activation in patients with severe and symptomatic aortic valve stenosis.

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#### CORRECTIONS

doi:10.1136/hrt.2006.104703

**Khattab Ahmed A,** Hamm Christian W, Senges Jochen, *et al.* Sirolimus-eluting stent treatment for unprotected versus protected left main coronary artery disease in the widespread clinical routine: 6-month and 3-year clinical follow-up results from the prospective multi-centre German Cypher Registry. *Heart* 2007;**93**:1251–1255. This article was published with the incorrect doi: 10.1136/hrt.2007.104703. The correct doi is 10.1136/hrt.2006.104703.

doi:10.1136/hrt.2009.187609corr1

**Naruko T,** Furukawa A, Yunoki K, *et al.* Increased expression and plasma levels of myeloperoxidase are closely related to the

presence of angiographically-detected complex lesion morphology in unstable angina. *Heart* 2010;**96**:1716–22.

In table 1, the Leukocyte count (/mm<sup>3</sup>) in SAP patients with a simple lesion was incomplete. It should have stated: 6445 (5103-7308).

doi:10.1136/hrt.2010.196626corr1

**Chimenti C**, Sale P, Verardo R, *et al.* High prevalence of intramural coronary infection in patients with drug-resistant cardiac syndrome X: comparison with chronic stable angina and normal

controls. *Heart* 2010;**96**:1926–31. Dr Cristina Chimenti should only have two affiliations: Department of Cardiovascular and Respiratory Sciences, La Sapienza University, Rome, Italy and the IRCCS San Raffaele La Pisana, Rome, Italy.