Letters to the Editor

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Thoughts

I do not forget my dear friends, who also have my admiration.

I promise to send a note soon that was thought of long ago in relation to the current surgery. I had the opportunity to discuss it with the great person that is Enio Buffolo when he was here in Buenos Aires last September in the Salta province.

I am closely following your publication. It is exemplary and enviable work.

I send my hellos from Buenos Aires, and also a friendly greeting to Domingo, about whom I have only the few updates that Enio sent to me regarding his company.

With one more hello, I am sincerely yours.

Adolfo Saadia, Buenos Aires-Argentina

Adjustable Pulmonary Artery Banding System

Dear Professor Braile,

It is a great pleasure to share with the editorial board of the Brazilian Journal of Cardiovascular Surgery a message received from a Scottish reader regarding our article published in 2007 (vol.: 22.1, pp.: 41-8), entitled "A Novel Adjustable Pulmonary Artery Banding System for Hypoplastic Left Heart Syndrome".

Certainly, these comments confirm the excellence and quality achieved in the publications of our journal, which currently has worldwide reach.

We would like to congratulate all of the Editorial Board of the Brazilian Journal of Cardiovascular Surgery and thank you once again for the opportunity to publish our study.

With our cordial regards,

Renato Assad – Heart Institute HCFMUSP - São Paulo/SP

Dear Professor Assad,

I read with interest your article on pulmonary artery banding in the Brazillian Journal of Cardiovascular Surgery (2007). I am a veterinary cardiologist in Scotland, United Kingdom and I am currently dealing with a patient who might benefit greatly from the type of procedure described in this report. I was wondering whether or not it would be possible to obtain two of these adjustable banding devices to use in my patient. The only commercially available adjustable banding device is far too big for his three kilogram cat.

I look forward to hearing from you in this regard.

Sincerely,

Craig Devine - Edimburgo/Escócia

Multimedia

I just watched the surgery attached to our journal. Congratulations on the initiative.

Herbet Rosa Pires Junior, Campos-RJ

Surgical treatment of chronic atrial fibrillation with conventional electrocautery in mitral valve surgery

We read the study of Dr. Jandir F. Gomes Jr with great interest. It studied the reversal of atrial fibrillation (AF) during mitral valve surgery using the electric scalpel for ablation of such an arrhythmia [1].

The prevalence of atrial fibrillation in patients referred for mitral valve surgery varies between 30% and 50%, and

the persistence of this arrhythmia after mitral valve surgery reduces survival due to heart failure and thromboembolism, and also worsens the quality of life [2]. Therefore, there is currently a strong consensus that patients with atrial fibrillation and involved in mitral valve surgery can not be discharged from the operating room without a procedure for the reversal of arrhythmia.

The proposition of Gomes Jr et al., which recommends using the electric scalpel as a source for radiofrequency for the ablation of AF, was shown to be simple, effective and able to restore sinus rhythm in 91.3% of patients at 6 months and 76.4% in 1 year. These results are comparable to those of randomized controlled trials recently reported in the literature [3]. In patients undergoing atrial fibrillation and mitral valve surgery without the use of ablation, less than 30% of them revert to sinus rhythm after surgery.

Despite the experimental evidence that the atrial lesion produced by the electric scalpel is not transmural, the results presented by the authors and the absence of complications observed in the procedure may justify its routine use in these cases. Moreover, there were no additional costs associated with the use of this technique. However, the routine use of this method should follow studies with larger numbers of cases that more effectively prove the safety and results obtained.

We would like to congratulate the authors for their contribution to the treatment options for patients with mitral disease and atrial fibrillation. However, we must reinforce the need to extend the reaches of the study in order to confirm the safety and effectiveness of such a method. A method of standardization could represent a huge benefit to this group of patients.

Walter J. Gomes – São Paulo - SP

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Answer

We appreciate the interest and the comments of Prof. Walter Gomes with regards to our study.

The surgical approach for the treatment of atrial fibrillation in patients who have undergone mitral valve correction has become almost a requirement if we want to improve the survival rates of these patients.

The use of electrocautery as an available and low-cost source of energy, combined with a technique for atrial approach that is simple and easy to reproduce, proved to be an important alternative for the treatment of atrial fibrillation during mitral valve surgery, according to results obtained in this study.

We agree with Professor Walter Gomes that a continuity of the study with the largest number of cases possible and better standardization is necessary if we want to confirm the safety and effectiveness of the method and, consequently, use it routinely in this type of patients.

The future perspectives for surgical treatment of AF point to the accomplishment of less invasive approaches, with the construction of lesions being strictly essential, and with readily available energy sources that ensure the contiguity of the lesions, application of ablation only in the epicardium (avoiding cardiopulmonary bypass), reduced access routes, less invasive procedures with lower morbidity rate and appropriate procedures for each kind of patient.

Respectfully,

Jandir F. Gomes Júnior - Campo Grande - MS

Statistics

Congratulations on the publishing of the Conceição, MJ article entitled, Critical Reading of the Statistical Data in Scientific Studies. (BJCVS. 2008; 23 (3):396-399).

It's a beautiful manuscript that will bring a little more sense to scientific analysis.

Luiz Carlos de Abreu

Department of Maternal Infant Health – Faculty of Public Health – University of São Paulo – São Paulo/SP

EuroSCORE

ORACLE OF DELPHI

- "Come back you won't die in war."

- "Come back, you won't die in war."
- "Come back you won't, die in war."

Comments on the study, EuroSCORE and the Patients Undergoing Coronary Bypass Surgery at Santa Casa de São Paulo, authored by Dr. Valquíria P. Campagnucci, presented at the 10th Congress of the Society of Cardiovascular Surgery of the State of São Paulo and published in issue 23.2 of the Brazilian Journal of Cardiovascular Surgery.

The initial purpose of the EuroSCORE was to predict the initial mortality in patients undergoing heart surgery in Europe, based on risk factors that could be clear, objective and easy to obtain [1]. The EuroSCORE was applied to 100 patients who underwent coronary artery bypass surgery in the Santa Casa of São Paulo, in order to evaluate the profile of these patients, and check the expected and the noticed mortality risk.

Regarding the patient profiles studied, 30% were elective procedures and 70% were emergency procedures. In EuroSCORE, there is a score for emergency surgery (surgery performed within one day of the decision to perform it) with a value of 2, as well as a non-emergency score, as reported in the study of the Santa Casa de São Paulo. Was emergency considered as a parameter for evaluation?

The application of EuroSCORE was performed in the highest risk populations (EuroSCORE> 6) as the study of Al-Ruzzeh et al. [2], but I couldn't find an association in the literature between the number of emergency surgeries and 24-hour emergency cardiology unit that would be able to justify a high rate of emergency surgery cases. Another point to be reported is that neither the primary failure of angioplasty nor acute myocardial infarction that required coronary artery bypass grafting were mentioned in the patients involved. Might there be a possible bias in the sample?

When evaluating the EuroSCORE, whose aim is to predict mortality, both on-pump and off-pump CABG present immediate mortality outcomes with no statistically significant difference, as in the study of Giffhorn et al. [3] and Calafiore et al. [4] (respectively, P = 0.46677 and P = 0.035). There are studies that show a reduction in hospital costs, and shorter time in intensive care, but this is only an estimate to be assessed in a particular subgroup of patients. Models of risk around 15% are considered to be high risk [5].

Regarding the sample's quantity, I believe in the need for inclusion of a greater number of patients and for a new statistical analysis to be performed. It is important to note that, for the development of a stable logistic regression model that compares hospitals and surgeons with a mean mortality of 3% to 5% and a reasonable number of predictive

variables (7 to 15), more than 2,000 cases will be needed [6]. The number of patients will vary according to the statistical model used.

Hélcio Giffhorn, Curitiba-PR

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Answer

We would like to thank Dr. Giffhorn for his comments and clarify that we consider emergency the situation where, due to unstable angina, post-infarction angina, or severe coronary lesions (lesion of left coronary trunk or trunklike), patients were referred for surgical treatment under use of nitrates, non-fractionated or low molecular weight heparin - in the same hospital in which the demand for medical care occurred. The table of risk factor prevalence in the sample of EuroSCORE does not show "emergency", and therefore our patients received scores according risk factors, definitions and scores related to the heart, as defined by EuroSCORE (Table 1). In Table 2 of our study, the number of patients in the emergency item is zero, strictly following the criterion of "surgery performed within one day of the decision to perform it", which did not occur in our sample.

We identified 14 patients with late restenosis after angioplasty. There were no cases of primary failure in our study. Anyway, there is no score in EuroSCORE for any of these situations. As for myocardial infarction, we also strictly followed the criteria listed in EuroSCORE; that is, CABG 90 days before the acute event. Forty-eight patients presented this characteristic in our sample, as shown in Table 2.

Our analysis was retrospective, and we noted that 25 high-risk patients underwent surgery without cardiopulmonary bypass, with no mortality in this group. It is likely that the clinical characteristics presented by these

patients have contributed to decision of surgical strategy used.

For the establishment of logistic regression model, thousands of patients are needed, found in the original study and through multicentric contribution. Even Germany, which included the largest number of patients (4,779), used 23 centers in total. If we analyze each of the European centers, we note that none of them alone presented the universe of patients necessary to validate logistic regression analysis.

Valquíria Pelisser Campagnucci - São Paulo - SP