



# EACTS Daily News

European Association For Cardio-Thoracic Surgery

The official newspaper of the 27th EACTS Annual Meeting 2013

Tuesday 8 October

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# Talent or training?



Professor José L Pomar said that the mission of the EACTS incorporates two important messages and one unique goal: education and research to ensure better treatment for our patients. In his Presidential Address, "Talent or training?", he shared with the audience how the Association is trying to achieve this goal.

"Those who know me well would be able to tell you that, if I am today addressing to you this Presidential Lecture, it is not because of my talent but certainly due to the chance to learn close to great surgeons and persons and also train daily, not only in the operating room, but also in many other areas of life," he began. "I made so many mistakes that helped me a lot to learn what to do."

He reminded the audience that the cardio-thoracic landscape has dramatically changed over the last 30 years, and today's leading surgeons are not stars like the surgeons of the past such as De Bakey, Cooley, Fontan, Borst, Ross, Yacoub, Carpenter, Semming and many others.

Although the EACTS is the leading cardio-thoracic association in the world with record attendances at the annual meeting, two hugely influential journals, a highly successful Academy programme, Pomar said that the Association has deemed education as the priority. This will be achieved through two main projects: a Pan-European training curriculum similar in all EU countries and a Quality Improvement Programme (QUIP).

## Training

He outlined the differences between training programmes in Europe and said that Association is concentrating its efforts through the Union Européenne de Medecins Specialistes, European Union of Specialists (UEMS), who may start a dialogue with the EU authorities, to discuss the future training of specialists.

"Our mission is to help at the highest level during the reconstruction of the Section and to ascertain that competences of trainees fulfil the EACTS standards," said Pomar. "We must

go altogether, as a single and unique voice."

He added that a new training programme must be open and flexible to accommodate different expectations and with special attention to innovation and to what cardiovascular medicine is going to be in the near future.

"The ultimate intention is to have a programme compatible at a much wider level, allowing residents from Europe to exchange with American, Australian and Asian trainees," he added. "This is of paramount importance in a world in which healthcare is becoming global."

## QUIP

He explained that the Quality Improvement Programme, led by Domenico Pagano from Birmingham, is designed to be an umbrella for many educational issues of the EACTS: outcomes, clinical consensus or statements, guidelines, education and publishing outcomes. A key component of the programme is not only publishing outcomes data, but good and reliable data.

"We cannot keep saying we are good, our surgery is better or my results are outstanding," he warned. "We need to demonstrate

it. Cardiologists learnt that before and will never believe our data if it is not accurate."

Pomar stressed that the future of the speciality is still in the hands of cardio-thoracic surgeons, but they need to evolve or face failure. Part of the evolution process is the 'Heart Team' concept and choosing the best treatment by consensus of the professionals dealing with cardiovascular diseases is always better, than deciding alone.

This was demonstrated by the EACTS and European Society of Cardiology joint guidelines on myocardial revascularisation.

He said the EACTS has evolved from an academic club of 200 prominent members to an organisation with some 3,000 active members, an annual meeting attended by 6,000+ people with over 27 years experience. However, the Association needs to be more transparent in all decision-making processes and members need to become involved.

"In a global world, I believe we need to be hand in hand to increase our most relevant mission to get the best for our patients. No borders, no walls, no limits," he concluded. "Screening talent from the beginning, teaching the young with passion, training properly and more homogeneously our residents with adequate programmes and tools, implementing quality every day, having scientific associations where they may grow in the arms of giants as friends, is the best way in my mind, to accomplish our goal – improve the outcomes for the benefit of patients."

## Optimising training for better patient outcome 10:15-11:45 Room 1

# The prospect of a common training programme in Europe

**Rafael Sádaba** *Complejo Hospitalario de Navarra, Pamplona, Spain*

s it is the case with so many other things subjected to regulation in Europe, surgical training suffers the difficulties of the European diversity.

At present, most of the 28 national states in the European Union have different training programme in Cardio-Thoracic Surgery (CTS). In order to identify the differences and quality of existing European training programmes in CTS, the Surgical Training and Manpower Committee of EACTS undertook a survey among trainees. The findings suggested that CTS training in Europe is

disorganized. There are profound inequalities in programme entry criteria, syllabus, quality assessment, length of training, requisites for certification etc.

Currently there are no established standards for training and in some cases training is suboptimal. Despite of this, there is cross-border recognition of specialist degrees. It would therefore seem logical and rational for the professional bodies in each European country to come together to agree a set of principles for training and a common curriculum. However, achieving the goal of a European training programme in our speciality is hampered by the variation in both the structure

*Continued on page 2*



Rafael Sádaba

## LUNCH SYMPOSIUM MECHANICAL SUPPORT OPTIONS IN ACUTE HEART FAILURE

Chairman: Christian Hagl, MD, PhD, Munich, Germany  
Co-Chairman: Frank Born, MCT, Munich, Germany



**MAQUET**  
GETINGE GROUP

**Date:** Tuesday, October 8th, 2013  
**Time:** 12:45 h - 14:00 h  
**Place:** Forum Room, Yellow Level

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**Focus Session**

10:15 Optimising training for better patient outcome

Room 1

Moderators: L. Hamilton, Newcastle upon Tyne;  
J. L. Pomer, Barcelona; M. Siepe, Freiburg;

- 10:15 Training – an inconvenient necessity M. Siepe  
10:30 The ideal training programme S. Lwasey  
10:45 What can I do to deliver better training? S. Kendall  
11:00 The prospect of a common training programme in Europe R. Schäfers  
11:15 Understanding better patient outcome B. Bridgewater

**Award Ceremony**

Hall D

- 11:45 Fontan Prize, Thoracic Prize, Leonardo da Vinci Award for Training Excellence

**The Honoured Guest Lecture**

Hall D

- 11:55 Evolving trends in the cardiovascular field: technological and non-technological aspects V. Foster

**Residents' Luncheon**

12:45 The Clash of the Titans

Crystal Lounge

- Table 1: Off-pump or on-pump P. Sergeant  
Table 2: Port-access or conventional F. Mohr, R. Dion  
Table 3: TAVI or AVR M. Borger, A.P. Kappeler  
Table 4: TEVAR or TAAA J. Becher, M. Czorny  
Table 5: ELCTS or Annals F. Beyersdorf, H. Edmunds  
Table 6: VATS lobectomy or thoracotomy F. Wells, Cambridge

- Table 7: Closing small congenital programs W. Brann, C. Schliensak  
Table 8: Invasive staging or imaging only Iba

**Cardiovascular Simulation Award**

12:45 Cardiovascular Simulation Award: The aortic root

Room 21

Moderators: P. Sergeant, Leuven; M. Turina, Zurich

- 12:45 Welcome and overview of Cardiovascular Simulator Award Initiative P. Sergeant  
12:50 2013 "aortic root simulator" submissions by the submitters, discussion by jury and public, strictly defined according to the total number of submissions  
13:45 My Virtual anastomosis – digital education platform (during jury deliberation) VZahorska  
13:55 Winner announcement & close P. Sergeant

**Professional Challenges**

14:15 Session 1: Transcatheter aortic valve implantation: crossing the chasm I

Hall E1

Moderators: F. Mohr, Leipzig; S. Senay, Istanbul; M. Van Mieghem, Rotterdam

- Learning objectives  
■ To put transcatheter aortic valve implantation in perspective.  
■ To get insights in expert experience.

- 14:15 My personal most challenging transcatheter aortic valve implantation procedures T. Wehler  
14:30 First registry results from the newly approved transcatheter Accurate transcatheter aortic valve implantation device J. Kemper  
14:45 Cerebral embolisation during transcatheter aortic valve implantation compared with surgical aortic valve replacement A. Alasser  
14:50 Paravalvular regurgitation after transcatheter aortic valve implantation is a non-predictable complication: a cusum analysis study

- 15:00 A. G. Cerillo  
15:15 Radiation dose during transcatheter aortic valve implantation T. Drans  
15:30 The economic impact of transcatheter aortic valve implantation – my personal appraisal M. Mack

Continued on page 12

**Film II 16:15 Hall F1**

## Looking for the better way to reconstruct bicuspid aortic valve by tricuspidization with autologous pericardium

Isamu Kawase, Toho University, Chashi Medical Center, Tokyo, Japan

There are many reports of aortic valve repair of bicuspid aortic valve. Most of them are to repair in bicuspid fashion. We think bicuspid aortic valve itself is abnormal.

Bicuspid aortic valve can make diseased valve much earlier than normal tricuspid valve. We believe the most effective aortic valve reconstruction is tricuspidization even for bicuspid aortic valve.

Our team has performed more than 600 cases of original aortic valve reconstruction which is basically tricuspid replacement by glutaraldehyde-treated autologous pericardium. In our original aortic valve reconstruction, tricuspidization of bicuspid aortic valve is relatively complex compared to reconstruction of tricuspid aortic valve. Sometimes, each pericardial cusp shows the significant discrepancy in its size. This fact has not yield any hemodynamic inferiority so far. But, we could see the discrepancy of cusp motion

because of size discrepancy. Out of concern for future deterioration of hemodynamics, we are now conducting commissural translocation to minimize cusp size discrepancy.

Our original aortic valve reconstruction is basically consisted of tricuspid replacement by autologous pericardium. Reconstruction of bicuspid aortic valve with keeping native cusp attachment line has sometimes shown major discrepancy of cusp size. This is the early report of commissural translocation to minimize cusp size discrepancy.

In our previously published data of 404 consecutive cases undergone original aortic valve reconstruction, 102 cases (25.2%) had bicuspid aortic valves. For tricuspidizing aortic valve reconstruction, there are two categories of patients. One has three well balanced native cusp attachment lines (Figure 1). Another has major size discrepancy among three reconstructive cusps (Figure 2). Original sizing instruments have sizes from 17 to 35 with every odd-numbers.

Among 102 patients with bicuspid aortic valve, 46 patients had more than four sizes discrepancy. And, major difference in cusp size yields significant difference of each cusp motion postoperatively. For this category of patients, we have recently performed commissural translocation in horizontal fashion for five patients with aiming longer durability. Firstly, reconstruction of bicuspid aortic valve with well-balanced annulus is introduced in this presentation (Figure 3). Secondly, an operation including commissural translocation is introduced (Figure 4,5).

Post-operative hemodynamic data was excellent with five patients operated by commissural translocation. Averaged peak pressure gradient was 12.8±5.9mmHg. There was no aortic regurgitation more than mild. Reconstruction of bicuspid aortic valve with minimal size discrepancy and new cusp attachment line by commissural translocation was feasible with excellent short-term results. We will follow longer term results.

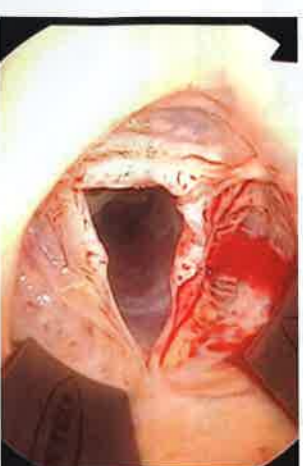


Figure 1



Figure 2



Figure 3



Figure 4

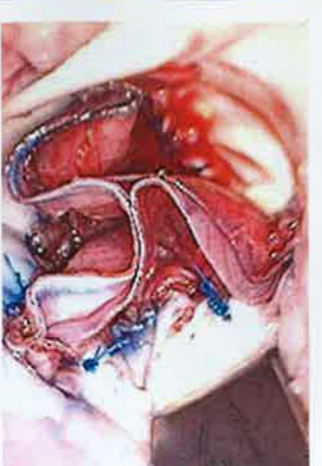


Figure 5

**Aortic valve and left ventricular outflow tract 16:15 Hall K**

## Impact of bicuspid aortic valve on postoperative valve-related morbidity after conventional repair for interrupted aortic arch/coarctation of aorta with ventricular septal defect

Ai Sugimoto, Noritaka Ota, Masaya Murata, Yujiro Ide, Makio Tachi, Hiroki Ito, Hironaga Ogawa, and Kisaeburo Sakamoto, Shizuoka City, Japan

We have been applying conventional repair for aortic arch (IAA) or coarctation of the aorta (CoA) combined with ventricular septal defect (VSD) including very small aortic valve (AV) at the bottom of the range z-score -7.0. Bicuspid aortic valve (BAV) is much more common in patients with IAA or CoA+VSD than in the general population. BAV is a common risk factor for valve-related problems. We retrospectively investigated the surgical outcomes after conventional repair with perspective of the valve morphology.

Between 2000 and 2012, 50

consecutive patients underwent conventional repair for CoA/IAA with VSD (one-stage repair, 44 [88%]; staged repair, 6 [12%]). The criteria for conventional repair were as follows: aortic valve annulus diameter (AVD) z-score, >-7.0; mitral valve annulus diameter z-score, >-4.0, without retrograde flow in the proximal arch.

Sixteen (32%) patients had BAV (group B), whereas the remaining 34 (68%) patients had a tricuspid aortic valve (group T). The surgical outcomes in groups B and T were investigated.

There was no mortality in this cohort. Median follow-up times were 6.3 (0 to 11.7) years and 6.2 (0.1 to 11.4) years in groups B and T, respectively ( $P > 0.05$ ). Preoperative data (median age at repair, median body weight, and median AVD) were comparable in the two groups ( $P > 0.05$  for all). Two patients

(4%) underwent re-interventions in the aortic arch: balloon angioplasty for re-coarctation in one, removal of the interposed graft because of somatic growth in the other. The AVD became significantly larger at one-year follow up, approximating the normal value, in both groups. Overall, aortic valve regurgitation was seen in 9/50 patients (18%), but was trivial in most. Three (6%) patients underwent a total of six valve-related re-interventions (balloon angioplasty 4, Ross operation 1 and valve replacement 1) without any morbidity or mortality. All three had BAV, and the AVD was 3.8 to 5.6mm (z-score, -7.6 to -2.4). In retrospect, we could not have predicted these patients' postoperative valve-related problems.

Five-year valve-related re-intervention-free survival was 76% and 100% in groups B and T, respectively ( $P < 0.01$ ).

Six patients (12%) had sub aortic z-score <-7.0 and 3/6 patients developed post-operative sub-aortic stenosis, regardless of AV morphology or AV annulus size. In contrast, the rest of 3/6 patients did not.

We have been using conventional repair for patients with small AV annulus who would be generally considered for applying other procedures (the Norwood procedure, the Yasui, and Ross operation). We found an acceptable surgical result under our treatment selection criteria, without mortality and with a low reCoA rate while patients had sufficient AV growth to support systemic output via the native AV alone. We also found that BAV was a strong risk factor for valve-related morbidity in patients with IAA/CoA+VSD, regardless of the AV annulus size and the degree of sub AS.