EuroIntervention

The Show is Over: time to start preparing the new one

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Out of Stockholm

Wednesday September 1st. The European Society of Cardiology congress has just finished. If you did not have to hold the fort back home and were lucky enough to attend it, I am sure you enjoyed seeing big new trials presented in the main arena and clever small studies discussed as abstracts and posters. Nowadays you can enjoy almost the same real time experience surfing the net, but you will always miss the comments after the sessions with colleagues from all over Europe and the world (ESC has participants from 148 countries!), or those discussions while waiting for the train back from the congress centre or strolling down Gamla Stan in the unusually mild weather. I am sure, however, you are also happy it is over, that the last thing you want to do after five intense days spent almost exclusively at the congress is to start thinking of the next. But this is exactly what our colleagues in the programme committee of our Association as well as all the other ESC Working Groups and Associations have already started doing far before the congress ended! I have been carrying with me the small booklet of the congress programme in my bag throughout the meeting. Maybe it is because of the glossy pages, but it was really heavy and it only contains the names of speakers and chairmen and titles of the sessions. The special issue of the European Journal with all the abstracts is the size of a telephone book of a middle sized city, something very few dared to carry, preferring the electronic version on a CD or the net. You have found a good excuse for a professional tax deduction – claiming that cool but expensive iPhone and iPad for next year's professional use!

Where do all these sessions and names come from?

The duty of the Society is to ensure a transparent process for the development of the symposia, debates and "How-to-Do" sessions, the selection of the almost 10,000 abstracts submitted each year, the choice of the best trials for the hotline and trial update sessions. A Chair of the congress programme committee is appointed for two years – this year Fausto Pinto from Lisbon, Portugal, next year Michael Boehm from Homburg, Germany – to orchestrate the work of the nine groups of individuals in the programme committee putting together the sessions for the various topics as well as organising the 900 graders for the abstracts. All this to ensure that the meeting offers what you expect from a congress: the right mixture of science (the new trials, the new studies) and education (state of the art, new techniques) and the opportunity of interaction with the investigators or the experts presenting their work.

Who can submit proposals for sessions to the ESC Congress?

Everybody remembers that the deadline for submitting abstracts for the ESC congress is St Valentine's Day, February 14th. Cardiologists are easy to recognise in restaurants that day: one moment they smile at their wife or partner, a red rose in their hand, the moment after they scroll through the revised text of that last minute abstract you absolutely need to send in on-time. Just like the abstracts, you are also encouraged to submit symposia, debates or "How-to-Do" sessions. The deadline is different, you must fill the on-line form in

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the ESC web-site www.escardio.com before September 30th. If you are a member of our Association, starting this year we have created a red carpet treatment for your proposals. Just answer the call for proposals sent every year at the end of May, after PCR, by the Scientific Programme Committee of our Association and submit a structured proposal including names and e-mail addresses of the participants by August 15th. This leaves the time for the members of our Scientific Programme Committee to merge proposals on similar subjects, add their own ideas and create a stronger package of sessions, scientifically sound and compliant with the rigid rules of the Society (never two people from the same country in a session, never a person chairing or speaking in more than two sessions). I am often asked what has happened to these proposals that are sent in, why some names change, including, sometimes, the name of the individual proposing the session. It happened to me a few times in the past, it is certainly disappointing, but you will understand why if you think how many hands the proposals pass through: do not stop sending them in, you still have the satisfaction to know that you contributed to shaping the programme of the ESC congress. If this can help, consider I had 0 (ZERO) talks in prearranged sessions in interventional cardiology this year because I think we must give a good example and use the power and influence given to us in a democratic election to serve the community and promote others... and not seize all the possibilities to shine ourselves and have personal gains. An overwhelming number of proposals are received for the number of sessions available, and only some truly outstanding proposals survive unchanged or with minimal changes. Most of the time the EAPCI Programme Committee must modify the original proposals, merge them with others, add more international flavour with names from other countries or make it more palatable for the general audience of the ESC congress with personalities coming from non-interventional backgrounds. From this year on, we will acknowledge receipt of all proposals and let the sender know whether it went through the first round of selections with part of the proposal being used to build the EAPCI package. Even if you pass this first scrutiny, however, you have reached only the beginning of the selection process.

SCOPE 1 and 2

An endless electronic spreadsheet called SCOPE 1 contains all the proposals of sessions sent by individual members, Associations and Working Groups. By the end of October they come back to you (SCOPE 2) scored by all the 80 members of the Programme Committee, representing all the various components of the ESC. The principle is that sessions presented at the ESC congress should be of some interest to the majority of the participants. After the proposals have been graded, the programme committee meets in November and makes the final selection. Quite a few of the experts in the group of interventional cardiology, peripheral vascular disease and cardiovascular surgery are designated following proposals of our Association. They have the right to rescue proposals they feel were particularly innovative, maybe too much so to be understood by our non-interventional and less expert colleagues in the other topic groups. Most of the time, however, they are expected to stick to the grades received and work to modify and improve the sessions receiving the best marks.

Names are often changed at this stage. Most proposals always repeat the same names, the big international stars. The principle we followed in the last years is to have a fair mixture of lively speakers and bright researchers who can attract a good audience as well as younger interventionalists who distinguished themselves through recent good publications or the introduction of new techniques and devices. The total number of sessions your topic will obtain at the end of the day depends on a final negotiation, where the results of the previous year are carefully considered. If the sessions of your group's programme received little attention with minuscule audiences as indicated by the Chairmen and the ESC assisting staff, you will likely lose sessions or, at least, your sessions will be confined to small rooms in the least appealing time of the day. Of course, sometimes you were just unlucky: the session was great but was held simultaneously with a key hotline session. Most often, however, it probably meant there was something wrong in the proposal, the title was not catchy, it sounded like the same as the year before, speakers included, it looked like repetition of data everybody knows, was too esoteric or too technical for the mainly clinical audience of the ESC congress.

Highlights of the 2010 ESC Congress

This year I had the privilege to present interventional cardiology at the Highlights Session for the second time.[1] It is a big responsibility because you communicate the key developments in the field to an audience mainly composed of non-interventionalists – our potential "customers" if you prefer – referring patients to us for angioplasty. I tried to collect as much material as possible. I sent, via the ESC staff, pleas to presenters to share their slides with me, I sneaked into abstract sessions and posters pestering young fellows to collect slides, always rushing to and fro between the many meetings of our Association. Besides the EAPCI Board on Saturday and seven committee meetings, always held in the early morning or late afternoon, on Monday afternoon we had the General Assembly, the largest ever in the history of our group, and the presentation of the results of the Stent for Life initiative in the initial five pilot countries preceded by the official ceremony seeing Italy, Romania and Egypt signing the Charter to join. I spent all night Monday and Tuesday trying to accomplish the impossible, condense in 12 minutes and 12 slides all the wealth of information presented over four intense days of congress. I failed miserably and the axe of the inflexible Chairman of the Highlights Committee, my good friend Petros Nihoyannopoulos cut the talk into pieces. Apologies to the many colleagues I disturbed in vain, but I hope you appreciated me trying.

The following topics were presented:

New ESC revascularisation guidelines

I showed two slides on stable angina that cost hours of discussion and negotiation, especially with our surgical colleagues.[2] The first states that the prognostic benefit of revascularisation in specific anatomical patterns (left main, 2-3 vessel with proximal LAD, etc.) is not limited to bypass surgery, the only technique compared directly to medical therapy in the classical trials of the 1980s, but is extended to angioplasty based on the indirect comparison of the stent vs. CABG trials. This acknowledges that it was impossible and

unethical to run the same trials against medical therapy and stresses the limitations of PCI vs. medical therapy trials (COURAGE and others), which excluded by protocol or de facto in the recruited population all the patients with potential prognostic benefit.[3] The second point – when to use surgery, when to use PCI – was even more controversial and is unique to the ESC guidelines. These guidelines do not generically speak of multivessel or left main disease, but dig into a detailed definition of the anatomical subgroups based on SYNTAX score and location of the left main lesion, with 3-vessel disease with SYNTAX score <22 and ostial or mid-shaft left main disease, isolated or with SVD, given a Class 2 Level A recommendation. This is a historical change from the anathemas of the former ESC stable angina and ACC/AHA/SCAI guidelines and the quite prohibitive EuroSCORE 10 requested by the previous ESC PCI guidelines to consider alternatives to bypass surgery. We had a well attended joint session with the SCAI Chairman Larry Dean and Past Chairman Steve Bailey on left main and diabetes, US vs. European practice. They both acknowledged that the ESC Guidelines were more liberal and detailed than their US counterpart.

Use and safety of DES

The revascularisation guidelines recommend the use of DES for all patients with no contraindications to double antiplatelet therapy. The reality, however, is still very different. In rich Germany, the 22,411 patients in the ALKK database presented by Ralf Zahn received a DES only in 36.5% of cases in 2009, more often implanted for in-stent restenosis, left main disease or after CABG and in diabetic patients[4]. It took three years to recover the deep fall caused by Barcelona 2006, when DES were wrongly linked to a mortality higher than BMS and a very late stent thrombosis of 0.5-0.7% per year was reported by the group of Bern and Rotterdam. Now LESSON 1 offers a chance to revisit this hot topic for second generation DES.[5] This large study in a consecutive population with complete follow-up elegantly presented by Stephan Windecker compared 2,684 patients treated with either a sirolimus eluting or an everolimus eluting XIENCE stent, matched following the rigorous propensity analysis of Peter Juni. The discussant, Peter Widimsky, rightly indicated that changes in technique and antiplatelet regimen may have influenced the result, but the point I stressed to the largely non-interventional audience is the extremely low incidence of target lesion revascularisation at three years (9.6% for SES and 7.0% for EES, p=0.039) and, especially, of definite stent thrombosis (1.6% SES v 0.5% EES, one in 200 at three years!, p=0.01) despite the inclusion in this all-comers trial of a large group of patients undergoing primary PCI. Surgery is also becoming increasingly safer, with the 3,000 patients of the ART trial presented by David Taggart with a 1.5% one year mortality (1% in-hospital), irrespective of the use of one or two mammary arteries.[6] It was a pity no MSCT substudy explored patency at one year, probably to avoid any interference with the primary endpoint of mortality at 10 years. Still, it was interesting to see that two mammaries could be implanted only in 84.5% of cases and that a 1.3% excess of surgical wound complications were observed in the patients with double mammary compared with the single mammary group (1.9 v 0.6% at one year).

Adjuvant pharmacology

This year we did not have the PLATO and CURRENT-OASIS 9 trial on new antiplatelet regimens (only the Phase 2 INNOVATE PCI trial was presented by Sunil Rao, which showed a good pharmaco-dynamic effect, prevention of ischaemic events and risk of bleeding of the new P2Y12 platelet receptor inhibitor elinogrel 100/150 mg) but we compensated with some interesting new data on antithrombotic treatment. A newly enrolled cohort of 2,505 patients following the inclusion criteria of the Munich's ISAR-REACT 3 trial showed that a lower dose of heparin 100 U/Kg retains the same efficacy in preventing ischaemic events of the originally tested 140 U/Kg, but has an absolute 1% lower major haemorrhagic complications with a decreased incidence of 30 d death, MI, urgent revascularisation and major bleeding (7.3% v 8.7%, p=0.007).[7] This suggests that this low dose can be an equally safe alternative to bivalirudine in patients without troponin rise (non-inferiority demonstrated in a retrospective, not truly randomised comparison). The even lower heparin doses tested in the ATOLL trial against 0.5 mg/Kg iv of enoxaparin in 910 patients undergoing primary PCI for acute myocardial infarction is probably closer to the practice of most of us. Even seasoned trialists like Gilles Montelescot may fall into the trap of designing "easy" combined endpoints (a pot-pourri of death, MI complications, procedure failure and major bleeding), difficult to sell even when met (but it was not: 28.0 v 33.7%, p=0.07).[8] Ironically, the generally accepted death/MI/urgent revascularisation secondary endpoint (but even the mortality endpoint alone) was significantly lower in the enoxaparin group (6.7 v 11.0%, p=0.01).

TAVI

Alan Cribier received the Gruentzig award by the ESC Board and gave his lecture in to an overcrowded room all listening to the inventor of this technique - and how the idea was initially trashed by influential colleagues as well as industry. He spoke of how painful it was to proceed with the burden of a prohibitive mortality observed in very high risk patients with the first prototypes until the development of more reliable, lower profile systems delivered retrogradely or transapically made the technique grow to a point of no return. Moderate aortic insufficiency, higher need of pacemaker implantation and theoretical questions on long-term durability of a crimped valve remain the main elements suggesting caution in the expansion of the current conservative indications limited to high risk or inoperable patients. The Great Debate on the "Highlights of EuroPCR" repeated the successful session of Paris, adding the voice of surgeons and health economists.

Repair of mitral regurgitation

I think many colleagues were shocked to hear that 1,032 patients received a MitralClip in Europe through 20/10/2010, with an exponential increase after the EVEREST II data were presented, showing equivalency with a surgical series of valve repair.[9] The European data was presented by the "énfant prodigè" Olaf Franzen, more than 160 cases of personal experience so far, suffers from a lack of coherent data entry, including late follow-up and the central audit indispensable to objectively capture the immediate and late results. Still, the results confirm that experience increases the

success rate (>96%), reducing major complications and in-hospital mortality, which are, unlike for TAVIs, below 1%. The other important difference with EVEREST II is the case mix, likely to reflect the true target for this device outside the artificial indications requested for a trial of comparison with surgery, with a large predominance of functional mitral regurgitation secondary to heart failure, a population virtually unapproachable surgically, with the exclusion of few cases benefiting from concomitant coronary bypass surgery, as well as one-third of the patients with degenerative mitral valve disease and major surgical contraindications. The importance of starting a European registry to capture these data is essential, both to understand the current indications and possibilities as well as gathering the essential data to plan a trial of comparison with medical treatment in the future. The Sentinel Registry on TransCatheter Valve Treatment (both TAVI and mitral repair) within the ESC EuroObservational Study programme is due to start at the end of this year and represents one of the important projects our Association is conducting under the lead of our mother society.

More information on the interventional programmes at ESC is available in the EAPCI website: www.escardio.com

Conclusion

The ESC congress hosts a large number of physicians who define themselves interventionalists, active participants who submit the highest number of abstracts per topic, with important interventional trials of general interest presented as well as educational sessions, all representing a unique arena to demonstrate to our colleagues from other cardiology subspecialties new developments in coronary and structural interventional cardiology. Its preparation is a complex process, not the easy decision of one-two congress directors, but the brainchild of a large group which potentially includes all participants, with greater opportunities for Association members. Its revenues are large, more than 20 million Euros/year, a profit reinvested in the other activities of the society, developing guidelines, supporting smaller Working Groups and basic science, awarding fellowships, preparing the certification platform for subspecialty training we need so badly for interventional cardiology. The ESC Congress belongs to us, medical professionals, not the Industry, not private organisations. The complexity of its organisation is sometime disheartening but it serves a purpose: a fair rotation of speakers offering everybody a chance to present new data and worthwhile experiences, subject to scientific scrutiny from blind peer review independent from Industry. It is a treasure which took 35 years to build but it is easy to destroy unless we all actively engage.

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