

35th Annual Meeting & Scientific Sessions Acropolis Congres Centre, Nice, France

France, Science, ISHLT and Nice

What better venue to bring the International potpourri of the ISHLT than to Nice. Before credit is given to France for the many important scientific achievements from the 18^{th} and 19^{th} Century, think about the parallel influence from Germany of then and now. Also, other influences from Europe cannot be ignored especially from England, Italy, Switzerland, Austria, The Netherlands, Russia and other parts of the world. But because we are in France, because France had an edge in the days of the Enlightenment, and because most of the major figures seem to have come from France and the Academy of Sciences in France, let's recall some of these names that still shape us today.

It was the great German Philosopher, Immanuel Kant (1724-1804) who characterized the enlightenment as a waking up to the realization that we created realms separate from ourselves on which we have become dependent. He further stated that enlightenment requires the courage to discern this, and that we must get rid of this self-imposed dependency or bias. Also, Germany gave us four faculties of education, Philosophy (included the Arts and Sciences) and the higher faculties: 1/ Law, 2/ Medicine and 3/ Theology - which takes care of life by teaching students how to settle people's differences, keep people healthy and take care of their souls.

Time will not permit much detail other than an alphabetized list of those from France and a word or two of their accomplishments.

- André-Marie Ampère, 1775-1836 electrodynamics
- Georges-Louis Leclerc, Comte de Buffon, 1707-1788 evolution
- Sadi Carnot, 1796-1832 heat, thermodynamics
- Georges Curvier, 1769-1832 Father of Comparative Anatomy
- René Descartes, 1596-1650 Father of Modern Philosophy
- Jean-Baptiste Lamarck, 1744–1829 Evolution of species
- Pierre Laplace, 1749–1827 Astronomy, Physics, Statistics, Laplace' Law (T=pr) the influence on heart, lung and circulatory physiology
- Antoine Lavoisier, 1743–1794 Father of Modern Chemistry, oxygen, combustion
- Louis Pasteur, 1822–1895 Principles of vaccination, microbial fermentation and pasteurization

What we know here is very little, but what we are ignorant of is immense

- Pierre Laplace

All of the above has made us a high reliability organization. We must act as one committed to truth in a culture of safety no different than the automobile industry with a vision to ZERO problems or never events. Thanks to Hermann and Andreas.

Not to be missed is the Federal Youth Ballet performance during this morning's Opening Plenary. The first of the dances is set to the music of the String Quartet by Ludwig van Beethoven and has been choreographed by the Director of the Company, John Neumeier. The second is a dance-impression of saying "Thank You" by young choreographer Sasha Riva. The ballet performance is sponsored by Volkswagen.

You can't always get what you want, but you get what you need A Review of Pre-meeting Symposium 06

Dr. Jose Maldonado's popular assessment tool was presented by psychologist, Quincy Young. The SIPAT tool consists of measured domains: readiness level, psychosocial stability, social support system, and substance dependence/abuse.

Review of studies using the SIPAT tool found it easy to use with confidence and reliability with reasonable results. Some negatives of the tool included difficulty with treatment adherence and relapse of psychiatric problems. Average scoring of the SIPAT tool ranges from 0-20. Perfect score is 0 and the higher the score, the greater the psychosocial risk. A score of >20 is concerning. Scoring summary: 0-6 excellent, 7-20 majority, 21-39 minimally acceptable psychosocial transplant candidacy. The tool additionally can predict rejection, hospitalizations and infection occurrences. Another limitation was the lack of accessing organ failure and mortality. This recent study was based on 1 year outcome and in the future would be beneficial to look at longer duration to assess the effectiveness of this tool. For more information and free tool access, email to request a form to Quinc Young: Qyoung@providencehealth.bc.ca

Heart and Kidney: Not just an interface but an interlace A Review of Pre-Meeting Symposium 08

This appropriately titled session chaired by Drs. Gonzalez-Costello and Baran contained six informative presentations. Dr. Colombo started off by describing how venous congestion can begin several days before symptoms of heart failure become apparent. He described how endothelial activation occurs as a separate entity leading to an inflammatory cascade. This was suitably followed by Dr. Costanzo describing the cardio-renal syndrome and in particular the sequence of events and consequences of splanchnic, hepatic and splenic congestion. She also presented some data from the CHAMPION trial and discussed how early detection of congestion prior to symptoms and its management reduced hospitalizations.

Dr. Testani went on to describe the metrics of congestion and the poor correlation between weight loss and fluid loss. He also eluded to the poor correlation between central venous pressure and blood volume and discussed hemoconcentration as a surrogate for volume but cautioned that this was not a marker to be used solely to guide decision making, merely an additional tool. Next, Dr. Burch presented the sequelae of a failing Fontan circulation including protein losing enteropathy and plastic bronchitis. He explained

that appropriate timing of transplantation remains difficult, and with respect to medical therapy, Bosentan remains the only agent, shown to have clinical improvement (reduction in NHYA class and improvement in VO2) in this group.

The final two presentations saw Dr. Czer tell of the Cedars Sinai experience with combined heart and kidney transplantation and how this is similar to the UNOS results with similar survival outcomes to heart transplant alone. Dr. Barten explained the strategies for renal sparing post cardiac transplant including delaying the introduction of CNI, CNI reduction and withdrawal with the use of everolimus as a possible alternative (NOCTET, SCHEDULE and on-going MANDELA study).

Extreme Donors: Pushing the Boundaries A Review of Pre-Meeting Symposium 14

As organ donor shortage is a big issue in heart transplantation, this Pre-Meeting Symposium addressed the possibilities to enlarge the organ donor pool. First Dr. Freed gave an overview on the implications of Heart donation from DCD donors and also pointed out which critical role the media play in this field, with questions like "Do we hasten death for transplantation?" or "Dead enough?". Dr. MacDonald then presented three essential rules for successful transplantation from DCD donors. First, to minimize organ damage during withdrawal of life support, second to optimize organ preservation and third to assess organ function prior to transplantation. In his second talk, Dr. Freed presented a method of ex-vivo assessment of hearts from DCD donors, which might be an important future tool to evaluate those hearts before transplantation. Dr. Kirk and Dr. Messer shared their experience on Heart Transplantation from DCD Donors from a Pediatric and an Adult Perspective, and demonstrated that we have in both fields a necessity to widen the donor pool, as still many patients are dying on the waiting list.

Dr. Baran finally closed this interesting session with his talk on risk factors for transplantation of hearts from DCD donors, and concluded that there is a large need for organ rehabilitation strategies as the hearts that we nowadays need to accept are of poorer quality. We therefore need to go new ways and do everything possible to maintain in the future the good results of heart transplantation that were achieved in the past.

From Novice to Expert: The biting start! A Review of Pre-Meeting Symposium 24

Dr. Carmela Tan from Cleveland Clinic in Ohio gives an excellent overview for the novice clinician in transplantation. Endomyocardial biopsy is the gold standard for ACR and antibody mediated rejection (AMR). Biopsies are taken from the right side of the interventricular septum. Several types of biotoms can be utilized for this process. Biopsy pieces generally range in size from 2-3 mm. Biopsies can be processed within 1 hour. There is a minimum of 3 specimens retrieved and stained, which reduces chance of biopsy sampling error. Biopsy site may cause an Endomyocardial thickening at the site of testing. The biopsy may appear as thrombus if recurrent biopsy from the same area. Additionally a large amount of fat seen on biopsy may indicate the biopsy was taken from the free wall instead of septum. The working diagnosis, which was newly updated in 2005 now combines the old Grade 1A, 1B and 2 called Grade 1R. Grade 2R shows modular infiltrates which is more diffuse. Higher rejection can be identified on a lower magnification. Additionally the biopsy may show diffuse multiple lesions indicating myocytes

injury. Other identifiers that can mimic rejection include quilty effect, infection and lymphoprolipherative disorder. Diagnosis may only be in one cell, which can be misleading. Also biopsy artifact can make interpretation difficult. This was a very descriptive instruction on the specific steps and interpretation of ACR.



TODAY'S FEATURES

Concurrent Session 1: Outcomes with mechanical circulatory support

VADs: How they doin'!

If you are interested to learn more about the evolving outcomes for patients on mechanical circulatory support be sure to attend the Thursday late morning session chaired by Dr. Birks and Dr. Santise in Apollon. The session opens with Dr. Schmitto presenting real world registry data (The REVOLVE registry) and experience with the HeartWare VAD across Europe and Australia. Dr. Potapov will then discuss the German experience with the HeartMate II device in an almost 500 patient cohort with an acceptable low complication rate. The session will also include results from a multi-center European study of 1000 patients with the HeartWare device presented by Dr. Krabatsch from Berlin.

Concurrent Session 3: Choosing the Best Recipients for Lung Transplant in the Era of Urgency How they compare!

The Cohort of Lung Transplantation (COLT) Study is an ongoing, prospectively gathered patient cohort from multiple institutions with the goal of identifying mechanisms involved in chronic organ rejection. The study presented in this abstract examines a subset of patients within the COLT cohort defined as high-emergency by a sudden decline in clinical status. Dr. Lacoste will present the results of the first 1000 patients who met these criteria and discuss short and long-term survival outcomes under the new regulations of organ allocation within the French system.

Concurrent Session 4: Donor Management-Organ Preservation-Heart: Extending the Margins How to overcome organ donor shortage?

Due to organ shortage, it is time for new ways in terms of organ preservation. In this Session, held today at 11am in Erato, Uranie it will be discussed how to increase the donor pool from donors outside standard acceptability criteria. Dr. Garcia Sáez will present data on normothermic organ preservation, while Dr. Connellan will provide information on the techniques of heart procurement in the Donation after Circulatory Death scenario. Furthermore Dr. Messer will present interesting data on functional assessment of the DCD Heart within the donor and ex vivo from a porcine model.

Concurrent session 7: Supporting the MCS Patient & Caregiver

Caregivers are our patients too!

Further review and assessment regarding quality of life and different factors associated with caregivers will be discussed in this dynamic session presented by The University of Tokyo, Japan.



Answer the Palliative Survey for ISHLT Members: The Twenty Questions Survey

On behalf of the Councils for Heart Failure and Transplant and MCS we are asking ISHLT members complete "The Twenty Questions Survey" which examines attitudes and practices with respect to the role of palliative care in thoracic organ transplantation and MCS therapies.

As a Society of health professionals and caregivers that have chosen to spend our careers dealing with patients that have end stage organ failure we often assume the role of the cardiac or pulmonary "oncologists". The care of end of life patients often falls to our care teams.

We would like to explore the ways in which we are integrating these services/attitudes and practices into our work. It is an important discussion and we would like get responses from our broad international membership.

We thank you in advance for completing the survey. If you choose to do this on line rather than in the paper format available at the ISHLT Nice meeting, please go to: https://www.surveymonkey.com/s/NNKQM7W

Please complete only one survey.



You are invited to participate in a discussion forum on

Thoracic Transplant Nursing

Hosted by
Cedars-Sinai Heart Institute

in collaboration with the
Nursing, Health Science and
Allied Health Council of the ISHLT

Friday, April 17th, 2015 12:30pm - 2:30pm (lunch will be served)

NH Hotel (Hotel Novotel)

2-4 Parvis de l'Europe

Nice, France
(adjacent to the Acropolis Convention Center)

Complete a pre-meeting survey by visiting: https://www.surveymonkey.com/r/TransplantNursing

See a meeting announcement card in your ISHLT delegate bag for more information and a meeting map



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