

Video Presentation

Heart Congress & Cardiac Surgery









12th World

Heart Congress and Cardiac Surgery
November 27, 2021 | Webinar



Heart Congress and Cardiac Surgery

November 27, 2021 | Webinar

New perspectives for prevention of the post-thrombotic syndrome

Paolo Prandoni

Arianna Foundation on Anticoagulation, Italy

The cornerstones of PTS prevention are the treatment of acute DVT with catheter-directed pharmaco-mechanic thrombolysis (CDT), the use of elastic compression stockings (ECS), and the replacement of vitamin K antagonists (VKA) with the novel direct oral anticoagulants (DOAC) for the initial and long-term treatment of DVT. The earlier recanalization of obstructed vessels with the use of thrombolytic drugs has long been advocated to decrease the rate of PTS. As, however, the results of a recent large randomized controlled clinical trial addressing the value of CDT for prevention of PTS in patients with proximal DVT failed to show an advantage of CDT over anticoagulation alone [1], the benefit/risk profile of this strategy remains uncertain. ECS are expected to play a role in preventing PTS. Although a large, double-blind randomized clinical trial failed to confirm the advantage of ECS [2], a recent meta-analysis of available controlled studies turned out to indicate a trend favoring the use of ECS [3]. Based on the results of a recent sub-analysis of a prospective cohort study, ECS are likely to prevent the development of PTS in patients with residual vein thrombosis (RVT) and/or popliteal valve reflux (figure 1) [4]. The inadequacy of VKA treatment is likely to play a key role in the development of PTS. The DOACs have now become commercially available worldwide. Because of their predictable pharmacokinetics, they can be used in fixed dose, without laboratory monitoring, and result in a much more stable anticoagulation than that induced by VKAs. Their use for the initial treatment of DVT is associated with a lower incidence of RVT than in patients treated with VKAs and has been reported to reduce the incidence of PTS [5].

Biography

Paolo Prandoni was born in 1947, graduated in Padua in 1971, and became PhD at Amsterdam University in 1992. He became Associate Professor of Internal Medicine in 2000, and Full Professor at the Department of Cardiovascular Sciences of Padua University in 2006. He belongs to the Scientific Committee of the Arianna Foundation on Anticoagulation in Bologna. His scientific activity is documented by almost 600 articles " in extenso" in high-impact scientific medical journals dealing with the pathophysiology, diagnosis and management of venous thromboembolic disorders.

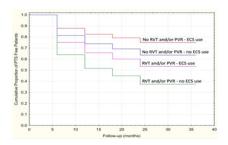


Figure 1. Cumulative incidence of PTS-free patients according to the presence of residual vein thrombosis (RVT) and/or popliteal valve reflux (PVR) and use of elastic compression stockings (ECS)

prandonip@gmail.com

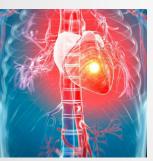


Accepted Abstracts

Heart Congress & Cardiac Surgery









12th World

Heart Congress and Cardiac Surgery
November 27, 2021 | Webinar



Heart Congress and Cardiac Surgery

November 27, 2021 | Webinar

Outcomes of Cardiac surgery in women vs men patients—insights from Israel national registries

Orit Blumenfeld and **Alina Rosenberg** Israel Center for Disease Control, Ministry of Health

Background: Women are associated with increased morbidity and early mortality in patients undergoing cardiac surgery. We aimed to compare the short- and mid-term mortality after cardiac surgery of women patients to men patients using national registries: the Adult Cardiac Surgery Registry (ACSR) and the National Mortality Registry (NMR).

Methods: The study population comprised of 8,826 adult patients who undergone one of the followed cardiac surgeries-(Isolated Coronary Artery Bypass Graft (CABG), Isolated Aortic valve replacement (AVR), Isolated Mitral valve replacement (MVR) or CABG+ valve related procedure) between January 2017 and April, 2019. Early and mid-term mortality data were obtained by linking to the NMR. Causes of death were retrieved from death certificates and from hospitalization summaries. Kaplan-Meier plots were created for each cohort and were compared by log-rank test. Cox regression analysis was performed to identify predictors of short and mid-term survival.

Results: One thousand nine hundred and ninety women patients (mean 66.2±10.3 years, 85.5% Jews) were compared with 6,836 men patients (mean age 64.2±10.1 years, 83.5% Jews). Median follow-up for women patients was of 33.4 months (IQR; 25.0-41.1) and for men patients were 33.2 months (IQR; 25.6-41.1). In women compared to men patients, 30-day mortality was higher (4.1% vs. 2.2%, respectively, p=0.0001) and 1-year and four –year survival was significantly lower (92.3±0.6 vs 95.4±0.3 and 86.3%±1.2 vs. 90.4%±0.5, respectively, p=-0.0001). Cox regression analysis reviled that risk factors that were found to be significant independent predictors of reduced mid-term survival included: women (HR=1.31, 95%CI; 1.09-1.6), Arabs (HR=1.5, 95%CI; 1.2-1.9), isolated MVR procedure (HR=1.5, 95%CI; 1.06-2.2) and CABG+ valve related procedure (HR=1.8, 95%CI;1.3-2.4).

Conclusions: Women are at higher risk compare to men for 30-day and mid-term mortality post cardiac operative procedures. These data should be discussed by the cardiac team, to optimize patient selection and maximize procedural value.

orit.blu@gmail.com



Heart Congress and Cardiac Surgery

November 27, 2021 | Webinar

Impact and prognostic value of tpe interval and tpe/ qt ratio on the myocardial reperfusion in patients treated with primary angioplasty

Hesham Refaat

Lecturer of Cardiology, Zagazig University, Egypt

Background: In ST elevation myocardial infarction (STEMI), the resulting transmural dispersion of repolarization can be evaluated by measuring the interval from the peak to the end of the T wave (Tpe interval) and Tpe/QT ratio. Myocardial reperfusion, when assessed by myocardial blush grade (MBG), is an independent predictor of adverse cardiac outcomes. The aim of this study was to elucidate the relationship between Tpe interval and Tpe/QT ratio and MBG in STEMI patients with successful revascularization.

Methods: This study included 403 STEMI patients treated with primary angioplasty. They were classified according to MBG into (MBG 0-1, n=170), and (MBG 2-3, n=233). The QT interval was measured from the onset of QRS complex to the end of T wave and the Tpe interval was measured from the peak to the end of T wave; at admission and after 90 minutes of revascularization. These parameters along with in-hospital adverse outcomes and long term all-cause mortality were recorded and compared between the two groups.

Results: Tpe interval and Tpe/QT ratio were significantly shortened at 90th minute of revascularization (P<0.001), and this shortening was more prominent in (MBG 2-3) compared to (MBG 0-1) (P<0.001). Tpe interval > 72.5 ms and Tpe/QT ratio > 0.18 were strong independent predictors of impaired myocardial reperfusion (P=0.004) and associated with lower 6 months survival rate (P=0.009, P=0.03, respectively).

Conclusions: Tpe interval and Tpe/QT ratio had a prognostic value where its prolongation was associated with impaired myocardial reperfusion and adverse in-hospital outcomes and higher all-cause mortality.

heshamrefat22@yahoo.com



Heart Congress and Cardiac Surgery

November 27, 2021 | Webinar

Cardiac surgery in developing countries: current perspectives in 21th century

Pradegan N, Herrera C and **Leon-Wyss J** Padova University Hospital, Italy

Cardiovascular disease is the leading cause of death worldwide, accounting for 17.5 million deaths every year, 80% of which occur in low- and middle-income countries. Differently from industrialized countries, where cardiac surgery is seeing a significant revolution in the use of advanced technologies and in the type of referred patients (e.g. older age, end-stage heart failure); underdeveloped countries still show a significant gap between potentially operable patients and available medical, economical and human sources for practicing this specialty. For years, undeserved countries have relied on international medical missions in local hospitals performed by teams coming from high specialized centers from U.S.A. and E.U. However, this approach has several limits: no continuity of care, no medical autonomy of local services, and no investment on local health structures. Consequently, in the last years many developing countries have consolidated self-sustaining surgical programs based on in-situ initiatives and resource allocation. With this presentation we aimed to revise current epidemiological trends on cardiac surgical programs in developing countries, analysing main referral diagnoses and surgical outcomes, and considering the economic impact of these programs. In particular we aim to show the Caribbean experience both in paediatric and adult cardiac surgery, highlighting the importance of raising awareness on favouring the rise of local programs. In fact, surgical departments relying on local health workers and based on 'hard work, perseverance, adaptability, and tolerance' principles can maintain excellent outcomes, with positive impact on economic costs and on undeserved countries evolution.

nicola.pradegan@gmail.com