

## Outcomes and Safety of Concurrent Coronary and Peripheral Catheterization (REVascularization in Concomitant PERIpheral artery disease and Coronary Artery Disease (REV-PERICAD Study)

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### Abstract

**Background:** Atherosclerosis mainly affects various vascular beds, such as the coronary and carotid arteries and peripheral vessels, of the lower limbs. Current recommendations for treating multiple vascular beds include targeted catheterization at different intervals and are mainly intended to avoid kidney injury. We examined the efficacy and safety of simultaneous coronary and lower limb catheterization.

**Methods:** This retrospective cohort study included 121 patients who underwent catheterization between January 2008 and December 2016. Patients were divided into four groups: 20 (16.5%) simultaneously underwent coronary and peripheral vascular bed catheterization; 32 (26%) underwent separate procedures (time interval between procedures > 2 months); 50 (41%) underwent staged procedure (time interval ≤ 2 months); and 19 (16%) underwent only peripheral catheterization (single procedure).

**Results:** No significant between-group differences were observed regarding demographic variables except for sex and diabetes and congestive heart failure incidences. Almost half of all patients who underwent single procedure were symptomatic. Successful peripheral catheterization rate was significantly higher in the single procedure group with no significant difference among the other groups. There were no significant between-group differences in major cardiovascular event, 30-day mortality, mortality within 1 year, and 24-h vascular complication rate/acute renal failure incidences.

**Conclusion:** Our study demonstrates the efficacy and safety of concurrent catheterization of coronary arteries and lower limb arteries, regardless of the time interval between the two procedures. Simultaneous catheterization of different vascular beds is an effective, time-saving, and safe option. Our findings should be verified in a large-scale prospective study involving additional vascular beds.



### Biography:

Koren has completed his MD at the age of 28 years from Tel-Aviv University. He is a senior invasive cardiologist at EMEK medical Center in Israel. He published several article regarding myocardial diseases, role of therapeutic hypothermia after cardiac arrest and the efficacy and safety of concomitant revascularization in coronary and peripheral vascular beds. Is a fellow member in the board of International Journal of angiology since 2014.

### Speaker Publications:

1. "Right-Sided Endocarditis involving Eustachian Valve Following the Use of a Central Venous Line"; American Journal of Case Reports. / 2020.
2. "Sinus Node Dysfunction due to Occlusion of the Sinus Node Artery during Percutaneous Coronary Intervention".
3. "Thrombin generation's role in predicting coronary disease severity"; PLoS ONE/ 2020/15(8):e0237024.
4. "Low venous thromboembolism incidence in high risk medical patients in an Israeli hospital. Can risk assessment be extrapolated to different populations?";/2020/PLoS ONE 15(7).

5. "Screening of Abdominal Aortic Aneurysm Using Portable Transthoracic Echocardiography among Patients with Acute Coronary Syndrome"; Cardiology Research and Practice 2020(1):1-5.

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