

Coronary angioplasty in elderly patients (real-world); implanted with 3 or more coronary stents; a single-center registry.

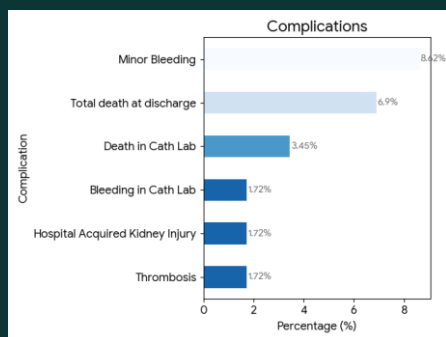
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Introduction: In randomized trials involving patients over 70 years of age, the 10-year prognosis was comparable with both revascularization modalities (percutaneous coronary intervention (PCI) and coronary artery bypass grafting (CABG).

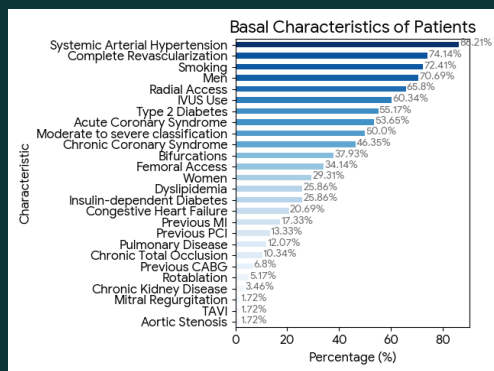
Objective: To analyze the immediate clinical outcomes in our population of patients over 70 years of age who underwent PCI and were implanted with 3 or more coronary stents at our hospital.

Methods: We retrospectively included 58 patients from our registry from October 2023 to April 2024.

Results: We included 58 patients with a mean age of 75.9 ± 4.46 years; 41 males (70.69%); 17 females (29.31%); Type 2 Diabetes Mellitus 32 (55.17%); insulin-dependent DM 15 (25.86%); Systemic arterial hypertension 50 (86.21%); smoking: 42 (72.41%); dyslipidemia 15 (25.86%); Chronic kidney disease: 2 (3.46%); Congestive heart failure: 12 (20.69%); aortic stenosis 1 (1.72%); TAVI 1 (1.72%); previous CABG: 4 (6.8%); previous PCI 20 (33.33%); previous MI: 26 (45.17%); mitral regurgitation 1 (1.72%); pulmonary disease 7 (12.07%); LVEF: $46.63\% \pm 11.06$; patients in shock were excluded. Intra-aortic balloon pump was used in: 14 (24.14%); radial access: 41 (70.69%); femoral access: 14 (24.14%). Syntax Score: 28 of implanted stents: 3.65 ± 1.03 ; stent length: 114.7 ± 31.1 mm; number of vessels treated: 1 vessel - 20 (34.4%); 2 vessels - 29 (50%); 3 vessels - 6 (10.34%); 4 vessels - 3 (5.17%); complete revascularization: 43 (74.14%)



Treated vessels: LMCA: 10 (17.24%); LAD: 47 (81.03%); LCx: 20 (34.48%); RCA: 24 (41.38%). Clinical presentation: chronic coronary syndrome: 27 (46.35%); ACS 31 (53.65%). Moderate to severe lesion complexity: 29 (50%); bifurcations: 22 (37.93%); Chronic total occlusion: 6 (10.34%); rotablation: 3 (5.17%); use of IVUS: 35 (60.34%). TIMI flow: 0-1 (1.72%); II-3 (5.1%); III-54 (93.10%); in-lab complications: death 2 (3.45%); bleeding 1 (1.72%); PCI success: 54 (93.10%). Length of hospital stay: 12.69 ± 7.3 days; in-hospital complications: total deaths at discharge 4 (6.90%); in-hospital renal injury 1 (1.72%); minor bleeding 5 (8.62%); thrombosis 1 (1.72%); and there were no CVA or major bleeding events.



Conclusion: Frequently, patients treated in daily practice present with a more unfavorable clinical profile, with more comorbidities and advanced age, as demonstrated by our registry. For these patients, PCI is the best treatment option, performed with a high success rate as our registry shows, thereby improving the quality of life for these patients who are often very limited due to multiple comorbidities and frailty.

References: Thuijs, D., Kappetein, A. P., Serruys, P. W., Mohr, F. W., Mack, M. J., Morice, M. C., ... Head, S. J. (2019). Percutaneous coronary intervention versus coronary artery bypass grafting in patients with three-vessel or left main coronary artery disease: 10-year follow-up of the multicentre randomised controlled SYNTAX trial. *The Lancet*, 394(10206), 1325–1334.