Aim of this case report: to present a case of secondary surgical revascularization after PCI of multiple in-stent restenoses. We would like to discuss pathophysiology and mechanisms of repeating in stent restenosis in DES and possible treatment strategies.

Case presentation: patient is M.K, 74 year old patient with history of arterial hypertension and hyperlipoproteinemia. In August of 2011 after NSTEMI and non significant lesions of LAD in bifurcation with D1 and RCA were verified. Conservative therapy was recommended.

In September of 2011 again after NSTEMI PCI of RCA was done with BMS.

In November of 2011 re PCI (POBA) of BMS for restenosis in RCA was performed. In January of 2012 patient was again admitted to hospital for unstable angina, coronarography was done, again subtotal in stent restenosis was observed, and re PCI was done with DES. Also lesion on LAD progressed and was significant. In March of 2012 successful PCI of LAD with one DES was done (provisional stenting of LAD-D1, with final balloon kiss). In May of 2012 she was again admitted to hospital for unstable angina, subtotal in stent restenosis in RCA was observed and POBA was done with optimal angiographic result. In July of 2012 again unstable angina and again POBA of stent in RCA. The whole time aortic regurgitation is observed which is now III-IV degree with EF of 50%.

In September of 2012 patient was again admitted to hospital with unstable angina. Again on angiography subtotal restenosis of RCA is verified. Also new focal significant restenosis in LAD was detected. Aortic regurgitation also progressed to IV degree (EF 50%). We indicated AVR + CABG, which was successfully done in same hospital stay. On last control patient was completely asymptomatic, with appropriate function of artificial aortic valve.

KEYWORDS: coronary artery disease, revascularisation, in-stent restenosis