Percutaneous coronary intervention in cardiac allograft vasculopathy: a case report

Cardiac allograft vasculopathy (CAV) is a major cause of morbidity and mortality after the first year of heart transplantation. It is characterized by progressive, concentric intimal hyperplasia and has a prevalence approaching 50% within the first 10 years after transplantation.

We report a case of a male patient who in 2007 at the age of 30 years underwent a heart transplantation due to dilated cardiomyopathy. Seven years later, during routine coronary angiography he was diagnosed with diffuse CAV. In follow-up angiographies successive progression of CAV was observed, despite modification of medical treatment, and it mandated percutaneous coronary intervention (PCI) with implantation of 3 drug-eluting stents (DES) in the left anterior descending artery, the circumflex coronary artery and the right coronary artery, culminating with a successful PCI with implantation of a further DES in left main coronary artery in 2016. Finally, in April 2017 he underwent a successful cardiac retransplantation.

PCI is a feasible bridging strategy for coronary lesions associated due to CAV, which includes unprotected PCI for the left main coronary artery stenosis, however the only definitive treatment for CAV is retransplantation.