Evolution of CTEPH Treatment: Pulmonary Vasodilator Therapy

Chronic thromboembolic pulmonary hypertension (CTEPH) is characterized by fibro-thrombotic material mechanically obliterating major pulmonary arteries, resulting in increased pulmonary vascular resistance (PVR), progressive pulmonary hypertension (PH) combined with a microscopic pulmonary vasculopathy, right ventricular (RV) failure and premature death. Survival in the eighties was dismal, while data from an international registry between 2007 and 2009 reported survival rates of 92, 75, and 60% at 1, 3, and 5 years. Data from a most recent European registry recruiting between 2015 and 2016 suggest even better survival. Surgical pulmonary endarterectomy (PEA), balloon pulmonary angioplasty (BPA), in combination with vasodilator drugs and have markedly improved outcomes in CTEPH. My talk focusses on the role of medical vasodilator treatments in combination with PEA and BPA.