**CLEARING OF β1-RECEPTOR AUTOANTIBODIES FROM THE BLOOD: A USEFUL TREATMENT OPTION FOR IDIOPATHIC DILATED CARDIOMYOPATHY**

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Dilated cardiomyopathy (DCM) is often associated with elevated levels of autoantibodies (AABs) against cardiac proteins and those against β1-adrenoreceptors appeared particularly relevant from a pathophysiological point of view. Thus, β1-AAB positive DCM patients exhibited poorer ventricular function, a higher prevalence of ventricular arrhythmias, and a higher prevalence of sudden cardiac death when compared with β1-AAB negative subjects. Whereas β1-AABs were usually detectable in <10% (more often ≤1%) of healthy controls and only in 10-13% of patients with ischemic cardiomyopathy, 26%-80% of patients with idiopathic DCM tested positive for β1-AABs. The prevalence of β1-AABs in idiopathic DCM appeared related with the severity of the disease. The highest prevalence of these AABs (up to >80%) was detected in patients with end-stage idiopathic DCM, especially in those who required ventricular assist device (VAD) implantation. Removal of β1-AABs by unspecific or specific immunoadsorption (IA) can improve cardiac function in DCM patients, allowing long-term stability of cardiac improvement. IA therapy appeared feasible even in end-stage DCM and well tolerated also by older patients. The prevalence of responders to IA was found to be about 79%. IA therapy can also spare many patients from heart transplantation (HTx) or will delay HTx listing for years. Thus, in β1-AAB positive patients with end-stage DCM, removal of these AABs appeared able to allow a 5-year HTx/VAD-free survival probability of about 70%. Post-IA recurrence of HF appeared related to reappearance of β1-AABs. Thus, in 76% of the patients with post-IA reappearance, redetection of β1-AABs coincided with worsening of cardiac function.