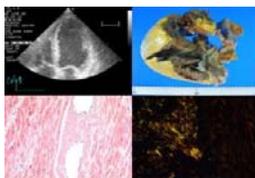


## A case of Heart Transplantation in a 77-year old with Cardiac Amyloidosis manifested as syndrome X

성균관 의과대학교 삼성서울병원 심혈관센터 순환기내과

\*송봉근 · 조수진 · 김정혁 · 박용환 · 이상엽 · 최승민 · 전은석

Amyloidosis often involves the cardiovascular system and results in cardiac diseases such as congestive heart failure, cardiomyopathy, valvular heart disease, and arrhythmias. Nevertheless, cardiac transplantation for amyloid heart diseases is uncommon because of progression of amyloid in noncardiac organs and the possibility of amyloid deposition in the donor heart. We reported that a 77-year old male had undergone heart transplantation because of progressive heart failure. He had suffered from anterior chest pain from 2002. Since his coronary angiographies in 2002 and 2005 showed no significant stenosis, he had been treated with nitroglycerine and diltiazem under the impression of syndrome X. In 2005, he was admitted because of pregressive heart failure. On echocardiography, the ejection fraction was 29% and the whole left ventricular wall motions were hypokinetic. Despite dobutamine injection and conventional medical treatment, dyspnea and cardiogenic shock persisted. Finally intra-aortic balloon pump was applied and maintained for 3 months to maintain the adequate cardiac output. Since left ventricular assist device is not available in Korea, finally heart transplantation was performed. The explanted heart revealed amyloidosis in pathology. He has been well for 2 years after transplantation and his cardiac performance is New York Heart Association Functional class I in his age. As this case, heart transplantation would be considered in few cases of senile amyloidosis refractory to conventional medical treatment.



## Pentraxin 3 as an inflammatory marker in Subjects with Metabolic Syndrome

가톨릭대학교 의과대학 순환기 내과

문동규\* · 이동현 · 윤호중 · 박정환 · 오수성 · 최윤석 · 박찬석

박훈준 · 장성원 · 박철수 · 오용석 · 정육성 · 승기배 · 김재형 · 최규보 · 홍순조

**Background and objectives :** Pentraxins 3 (PTX3) known as a long pentraxin is highly expressed in the heart, whereas, C reactive protein (CRP) is a short pentraxin and is produced from the liver. In previous studies, PTX3 was increased in acute phase of myocardial infarction (MI) and showed prognostic significance in MI patients. The aim of this study was to estimate the value of PTX3 as an inflammatory maker in patients with Metabolic Syndrome (MS) defined by the National Cholesterol Education Program. **Subjectives and Methods :** Total 59 subjects (mean age: 60±12 years, M:F = 36:24) were enrolled and they were divided into MS group(N = 32, mean age:62±12 years, M: F ratio = 19:12) and control group(N = 28, mean age: 59± 11 years, M:F ratio = 16:12) according to the parameters of NCEP. Intima media thickness (IMT) of common carotid artery was measured using high frequency transducer. Serum PTX3 and CRP concentration was measured with ELISA. **Results :** 1. No significant correlation was observed between serum PTX3 and CRP concentrations ( $r = -0.117$ ,  $p = 0.396$ ). 2. The serum PTX3 concentration was significantly increased in MS than control group( $1.18 \pm 1.0$  vs  $0.73 \pm 0.3$  ng/ml,  $p = 0.028$ ). 3. The serum CRP level was not significantly different between MS and control group ( $2.15 \pm 2.0$  vs  $1.25 \pm 1.3$  ug/ml,  $p = 0.055$ ). 4. Among the parameters determining MS, increasing waist circumference was independently associated with supramedian PTX3 concentration( $p < 0.01$ , odds ratio(95% confidence interval): 5.96 (1.58-22.5)). 5. Right and Left mean IMT was increased in MS than control group( $0.94 \pm 0.20$  vs  $0.81 \pm 0.20$ ,  $p < 0.05$ ,  $0.93 \pm 0.20$  vs  $0.79 \pm 0.20$  mm,  $p < 0.05$ ). 6. There was no correlation between serum PTX3 concentration and IMT. **Conclusions :** PTX3 can be an useful inflammatory marker in metabolic syndrome and central obesity is independent factor for increment of serum PTX3 level.