

Endomyocardial Biopsy : One Center Report about Its Role

가톨릭의대 순환기 내과

*오수성 · 윤호중 · 박정환 · 이동현 · 최윤석 · 박철수 · 오용석 · 정옥성

Background : Cardiomyopathy is a common cause of congestive heart failure, however, sometimes it is very difficult to find out its exact etiology. Endomyocardial biopsy (EMBx) has been considered as one of the important diagnostic modalities for unexplained cardiomyopathy. The aim of this study was to analyze the diagnostic value of EMBx. **Methods** : The 30 patients (M:F 26:4, mean age 41 ± 11 yrs) underwent EMBx between 1992 and 2005 in St. Mary's hospital were enrolled. The patients were classified into 5 groups by their clinical manifestations as follows: Group I: 11 patients(pts) with LVH of unknown etiology, Group II : 10 pts with heart failure of unknown etiology, Group III : 5 pts with suspicious myocarditis Group IV: 2 pts with peripheral hypereosinophilia, Group V: 2 pts with suspicious ARVD and metastasis of carcinoma. **Results** : 1. EMBx confirmed the diagnosis in 8 of 30 cases (26.7%). 2. In Group I, 3 pts were confirmed to have amyloidosis.(18.2%) 3. In Group II, and III, 2 pts were diagnosed to have viral myocarditis.(10%, 20 % respectively) 3.In Group IV, all of 2 pts(100%) were diagnosed as hypersensitivity myocarditis. 4. In Group V 1 pts was confirmed to have cardiac metastasis of esophageal cancer. 5. There were no complications related with EMBx. **Conclusion** : EMBx must be a valuable tool to confirm the diagnosis, however, it is possible to get the good result only in selected pts. Especially, EMBx is useful in the diagnosis of LVH of unknown etiology such as amyloidosis and hypersensitivity myocarditis. Therefore the pathologic findings of EMBx should be always considered with clinical findings.

Effect of Rosiglitazone on Renal Vasoactive Peptides in DOCA-Salt Hypertensive rats

Departments of Internal Medicine and † physiology, Chonnam National University Medical School, Gwangju, Korea :

*Cardiovascular Center, Korea University Anam Hospital

*Eun Hui Bae, Sang Yup Lim JungUn LeeSeong Kwon Ma Nam Ho Kim Ki Chul Choi Youngkeun Ahn Jeong Gwan Cho
Jong Chun Park Myung Ho Jeong Jung Chae Kang Soo Wan Kim

Background : Deoxycorticosterone acetate (DOCA)-salt hypertension (DSH) is an animal model of volume dependent hypertension. It has been known that peroxisome proliferator-activated subtype γ -receptor agonists (rosiglitazone, RGZ) would have potent blood pressure-reducing effects and significantly improve vascular function and structure in DOCA-salt rats. We investigated the effects of RGZ on renal expression of vasoactive peptides in DOCA-salt hypertension. **Methods** : Rats were implanted with DOCA strips (200mg/kg sc) on 1-week after unilateral nephrectomy. Two weeks later DSH rats received control diet with or without RGZ (4 mg/kg/day) for another 2 weeks. Nitric oxide synthase isoforms (eNOS, nNOS, iNOS) and neutral endopeptidase (NEP) was determined in the kidney by semiquantitative immunoblotting and innunohistochemistry. The mRNA expression of natriuretic peptides (NPs; ANP, BNP, CNP) and endothelin-1 (ET-1) was determined by real time PCR. **Results** : In DSH rats, systolic blood pressure (BP) was markedly increased and RGZ decreased BP. mRNA levels of ANP, BNP, CNP and ET-1 were increased in the kidney in DSH rats, while the expression of NEP was decreased. The expression of eNOS and nNOS was decreased, while iNOS expression was increased in the kidney in DSH rats. RGZ prevented upregulation of NPs. In addition, it attenuated the decreased expression of eNOS and nNOS as well as increased iNOS expression. **Conclusion** : RGZ treatment reduced BP in DSH rats. Downregulation of eNOS and nNOS protein expression in the kidney may play a role in the pathogenesis of development of hypertension in DSH rats, while increased activity of NPs may play a compensatory role which was counteracted by RGZ.