

Prostacyclin 치료에 반응한 전신성 홍반성 낭창에 동반된 폐동맥 고혈압 1례

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전신성 홍반성 낭창(SLE)은 다발성 기관에 염증 반응을 일으키는 질환으로 폐동맥 고혈압의 발생은 매우 드물며 치료하기 어렵다고 알려져 있다. 본 증례에서는 SLE 및 폐동맥 고혈압(수축기 67mmHg, 평균 41mmHg)과 색소 상연 림프절 종창을 동반한 36세 여성에서 폐동맥 고혈압의 치료제로 고용량 칼슘 길항제와 경구용 PG₂ 유도체의 치료 효과를 비교하였다. 환자는 운동시 호흡곤란 및 전신부종을 호소하였고 범혈구 감소증, FANA 양성, C3, C4 저하, anti ds DNA 증가 및 경도의 심낭 삼출액 소견이 관찰되었다. 색소 상연 림프절 종창의 절제 생검 결과 T 림프구로 구성된 표재성 비후(paracortical hyperplasia)가 관찰되었다. 폐동맥 고혈압의 치료 목적으로 단기간의 고용량 칼슘 길항제(2.4mg/kg/day)와 스테로이드 병용요법 결과 폐동맥 고혈압의 악화소견을 보여 중단하고 경구 PG₂ 유도체(1mcg/kg/day)와 고용량 스테로이드를 병용 투여한 결과 수축기 폐동맥 고혈압이 18mmHg 감소 되었다.

전신성 홍반성 낭창에 동반된 폐동맥 고혈압의 치료로 경구용 PG₂ 유도체의 장기적 예후에 관한 전향적 연구가 요망되며 고용량의 칼슘 길항제와 경구용 PG₂ 치료제 간의 적응증을 결정하는 지침이 필요하리라 사료된다.

Effect of hypertension on coronary flow reserve in controlled diabetes mellitus with normal coronary arteries

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Background & Objectives: It is well known that DM and hypertension consists of two common causes of coronary heart diseases which causes to cardiovascular morbidity and mortality through disturbance of coronary flow. Recently, hypertension and LVH in absence of coronary artery diseases also increased adverse cardiovascular event and in controlled diabetic patients with normal coronary angiogram decreased myocardial function has been observed. These potential mechanism is related to reduced coronary blood flow reserve which increases vulnerability of the myocardium to ischemic damage and enhanced arrhythmogenesis. However, the effect of hypertension on coronary circulation in controlled DM with normal coronary arteries is still controversial. Therefore, this study aims to assess the effect of hypertension on coronary flow reserve in relatively controlled diabetic patients with angiographically normal coronary arteries by using thallium cardiac SPECT and also to clarify correlation of diabetic cardiomyopathy with microangiopathy.

Methods: We reviewed the medical records of 54 patients with normal and mild diseased coronary arteries at angiography who visited the Hanyang University Hospital and underwent thallium cardiac SPECT. All persons had normal systolic function with normal valvular status. Diabetic patients had disease duration within 10 years. Patients were divided into four groups(group1;normal control, group2;hypertension, group3;DM, group4;DM with hypertension). We compared thallium washout rate correlated with coronary flow reserve among 4 groups.

Results: 1.The thallium washout rate was significantly lower in DM group than in normal control(normal;47.2%, DM;37%, $P<0.01$). Especially, in diabetics with hypertension(35%), washout rate was significantly lower than that of others. 2.The thallium washout rate was more closely correlated with DM than hypertension. 3.The thallium washout rate related to blood glucose level and had no correlation with HgA_{1c} and disease duration

Conclusions: Most of all, DM may itself be responsible for both structural and functional alterations of the coronary microcirculation in normal coronary arteries which lead to reduce coronary flow reserve. Also hypertension may contribute to the more progressive deterioration of coronary flow reserve correlated with cardiovascular event. Therefore, aggressive blood pressure control is recommended from early diabetes stage. However, further reseaches are need for clarifying what is exact mechanism to reduce coronary flow reserve in DM with normal coronary angiogram.