cysteine on the expression of the fibrinogen B  $\beta$  chain, BTG1 and THRP genes as a homeostatic adaptive response during protein deficiency.

## Poster Presentations - Field A2. Therapeutics

[PA2-1] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

## Antiproteinuric Effect of Enalapril in Children with Nephrotic Syndrome

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Enalapril, an angiotensin converting enzyme inhibitor, was used to treat pediatric patients with nephrotic syndrome. The objective is to study the antiproteinuric effect of enalapril in children with nephrotic syndrome.

Patients were eligible when the children with nephrotic syndrome were treated with enalapril and corticosteroid at Seoul National

University Children's Hospital. The exclusion criteria were the secondary nephrotic syndrome. Dosage of enalapril started with 0.1mg/kg/d. The primary variables evaluating efficacy of enalapril to nephrotic syndrome were time-dependent changes in serum total protein, albumin, total cholesterol and serum creatinine, BUN and urinary protein/creatinine ratio. Adverse drug events associated with enalapril and corticosteroid were evaluated. There were total 35 patients with 26 boys and 9 girls, age ranging from 3 to 22years. Ten patients had hypertension at baseline.

Histological lesions were focal and segmental glomerulosclerosis in 18, minimal change nephrotic syndrome in 7, membranoproliferative glomerulonephritis in 2, membranous glomerulonephritis in 1 and 7 patients not done kidney biopsy.

Serum total protein and albumin levels increased simultaneously. Total protein increased from  $5.1(\pm 1.1)$  g/dL to  $5.7(\pm 1.0)$ g/dL (p=0.029) and  $6.1(\pm 1.1)$ g/dL (p=0.009) at 6 months and 3 years after treatment, respectively. Serum albumin increased from  $2.4(\pm 0.9)$ g/dL to  $2.9(\pm 0.9)$ g/dL (p=0.009) and  $3.3(\pm 1.2)$  g/dL (p=0.005) at 6 months and 3 years after treatment, respectively. Total cholesterol level decreased from  $384.7(\pm 156.5)$ mg/dL to  $293.4(\pm 160.5)$ mg/dL (p=0.081) at 3 years after treatment. Serum creatinine level showed statistically significant change and BUN level showed no statistically significant change. Enalapril

treatment was associated with significant and persistent reduction of urinary protein/creatinine ratio from  $16.3(\pm 20.6)$  to  $6.0(\pm 8.9)$  (p=0.011) and  $3.7(\pm 7.0)$  (p=0.003) at 6 months and 3 years after treatment, respectively.

Side effects of enalapril were observed for cough in one patient and elevated BUN and Scr in one patient.

We conclude that enalapril treatment was effective in reducing proteinuria with preserved renal funtion.

[PA2-2] [ 10/18/2001 (Thr) 14:00 - 17:00 / Hall D ]

Cyclosporin Induced Hyperuricemia and the Uricosuric Efficacy of Benzbromarone in Kidney Transplant Patients

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