

Long-Term Enalapril Therapy in Bartter's Syndrome

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Sir,

We read with interest the paper by Van Stolpe et al. [1]. These authors showed that enalapril 'improves serum potassium, TBK [total body potassium] and complaints'.

We have had the opportunity to treat 3 adult patients with Bartter's syndrome with enalapril [2]. The long-term treatment was effective, improving hypokalemia with low doses of enalapril (table I).

I agree with these authors that enalapril improves plasma potassium and complaints – mainly tetany and polyuria. Nevertheless, in our experience there are some problems. Firstly, we used a lower dose of enalapril in order to avoid arterial hypertension. Probably for this reason, plasma potassium was never normalized. Secondly, the blood pressure response to exogenous antihypertensive II did not return to normal values. Thirdly, the drug had to be stopped in 2 cases because of secondary effects after 9 months of treatment, in one patient because of reversible renal failure (the highest level of serum creatinine was 1.9 mg/dl) without proteinuria and in the other because of an increase in serum bilirubin (the maximum level was 1.7 mg/dl) without alterations of liver enzymes. This problem disappeared with the cessation of enalapril therapy.

Finally, we think that enalapril can be considered as an adequate palliative therapy in Bartter's syndrome. Nevertheless we are not as optimistic as Anja et al., because of the possible appearance of clinical hypotension and other secondary effects.

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Table I. Long-term enalapril therapy in Bartter's syndrome

	Case 1		Case 2		Case 3	
	before	6 M	before	9 M	before	9 M
K ⁺ mmol	2.5	3.6	2.2	3	2.5	3.3
PRA, ng/ml/h	22.5	38	20	34	30.2	41
PA, ng/dl	62	14.8	49	26	58	21.3
MAP, mm Hg	83	83	91	86	96	95
Enalapril, mg/day	–	10	–	10	–	10

M = months; K⁺ = plasma potassium; PRA = plasma renin activity; PA = plasma aldosterone; MAP = mean arterial pressure.

References

- 1 Stolpe, A.V.; Verhoef, G.E.G.; Herve, R.J.; Koomans, H.A.; Van der Vijver, J.E.M.: Total body potassium in Bartter's syndrome before and during treatment with enalapril. *Nephron* 45: 122–125 (1987).
- 2 Morales, J.M.; Ruilope, L.M.; Coto, A.; Alcazar, J.M.; Praga, M.; Miranda, B.; Bello, I.; Nieto, J.; Rodicio, J.L.: Short-term enalapril therapy ameliorates the hypokalemia of Bartter's syndrome. *Proc. Eur. Dial. Transplant. Ass.* 21: 76 (1985).

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