Famotidine Reduces Serum Parathyroid Hormone Levels in Uremic Patients

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Dear Sir,

Despite the increasing number of reports on the effects of cimetidine and ranitidine on serum parathyroid hormone (PTH), the role of these agents in the treatment of secondary hyperparathyroidism is controversial [1-3]. To our knowledge, famotidine has not been tried before for treatment of secondary hyperparathyroidism in uremic patients.

In order to evaluate the effect of famotidine, a potent long-acting histamine H₂-receptor antagonist, on serum PTH levels in uremic patients with secondary hyperparathyroidism, we administered 20 mg/day famotidine for 4 weeks to 8 uremic patients on regular hemodialysis. Besides serum PTH (amino-terminal region of PTH molecule) levels, serum concentrations for calcium, phosphate and alkaline phosphatase were determined before and after therapy.

In all patients, famotidine therapy resulted in significant decreases in serum PTH levels in that mean serum values of PTH fell from 311.62 to 168.02 pg/ml during treatment ($p < 0.05$), while no significant changes in serum calcium, phosphate and alkaline phosphatase levels were noted. In this short-term study, in spite of a significant decrease in mean serum PTH levels, we did not observe

any noticeable change in other biochemical parameters. We conclude that further larger and lengthier studies which evaluate the clinical and radiological alterations in addition to the changes in biochemical parameters during famotidine treatment are required to confirm whether famotidine therapy will be of value in the medical treatment of secondary hyperparathyroidism.

References

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