ZOLEDRONIC ACID AND ACUTE RENAL FAILURE IN PATIENT WITH CUSHING DISEASE

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Hypercortisolism has many systemic manifestations including severe bone mass loss. Recently, zolendronic acid (ZA) has been approved by FDA as an adjunctive drug on treatment of chronic glucocorticoid use induced osteoporosis. Indeed, ZA was included in the management of osteoporosis for Cushing´s Disease (CD). This approval was majorly based on one randomized clinical trial of non-inferiority between ZA and orally administered risendronate with one year seguiment with a substitute end point – bone mass change with treatment. Our objetive is to describe one girl with confirmed CD and symptomatic osteoporosis, who suffered acute nephropathy soon after ZA infusion that was observed at our Endocrinology Division. A 22 years old female came to our clinic complaining about weight gain, hypertension and weakness. During evaluation, we found an ACTH dependent CD. After sinus petrosal catheterization confirmed pituitary origin of disease, we proceeded to transesphenoidal surgery. Unfortenally, she was not cured by neurosurgery so we went to treatment with ketoconazole plus central nervous system radiotherapy. One year after that, she was treated with ketoconazole 300 mg/day, but still symptomatic of CD, when we found 3 costal arch fractures associated with low bone mass density (T -4,1 at vertebrae), so we started to treat her with calcium and vitamin D supplementation. Later on, we prescribed a shot of zolendronic acid, but after 4 days she showed a skin rash, creatinine increase and symptomatic hyperkalemia, reverted after a week of management without dialysis. In November 2009, FDA reported a series of 24 patients that suffered acute renal failure, including 7 deaths, associated with ZA infusion for the treatment osteoporosis. Our observation suggests Cushing disease patients, who usually have many severe co-morbidities related to endogenous hypercortisolism, might be a group in greater risk for kidney failure related to ZA use and should be monitored.