HYPERCALCIURIA IN A PATIENT WITH CENTRAL DIABETES INSIPIDUS

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Introduction

 Central diabetes insipidus is characterized by increased water excretion which is corrected by the administration of antidiuretic hormone

Hypercalciuria is known to be associated with osteoporosis

Aim

The aim was to describe the case of a patient with central diabetes insipidus, hypercalciuria, vitamin D deficiency and severe osteoporosis

Case Report

- The case of a patient, female aged 64 years, presenting with central diabetes insipidus, hypercalciuria, vitamin D deficiency and severe osteoporosis is described
- The patient suffered from central diabetes insipidus since the age of 20 years
- Laboratory investigations revealed severe hypercalciuria, urine calcium levels being 800 mg/24 h, decreased blood calcium and vitamin D deficiency, 25(OH)D3 levels being 10 ng/ml (normal levels > 30 ng/ml)
- PTH levels were increased and T score was -4
- Vitamin D was administered along with a thiazide diuretic for the correction of vitamin D deficiency and hypercalciuria

Case Report

- Vitamin D levels increased and hypercalciuria was partially corrected
- Sequentially, strontium ranelate was administered without an improvement in bone density
- Strontium ranelate was stopped, alendronate was administered and bone mineral density increased

Conclusions

- The extremely rare case of a patient with central diabetes insipidus, hypercalciuria, vitamin D deficiency and severe osteoporosis is described
- Hypercalciuria was partially resistant to thiazide therapy as well as osteoporosis to strontium ranelate, finally improving with bisphosphonates
- The coexistence of hypercalciuria, salt losing nephropathy and renal diabetes insipidus has been described in the context of glomerular disease

Conclusions

 Osteoporosis in the context of central diabetes insipidus has also been described, responding to bisphosphonates

However, the coexistence of central diabetes insipidus with hypercalciuria and severe osteoporosis is extremely rare