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.