



Longest survival with central diabetes insipidus; More than 30 years without and 25 years with desmopressin treatment



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Introduction:

Diabetes insipidus (DI) is a disease characterized by excessive thirst, polydipsia and excess diluted urine caused by insufficiency of antidiuretic hormone or renal resistance to its effect. Although it is generally a benign condition, severe hypernatremia and hypertonicity may cause death if water loss is not compensated.

Case report:

A 72 years old man admitted to our clinic for routine control. In medical history, he told that when he was about 9 years old, polyuria and polydipsia had started and he was diagnosed to have DI when he was 17 years old in 1959. At that time, he was told to drink water as much as possible since there was not any drug available in our country. He had been drinking about 15-16 litres of water in those years. About 25 years ago, desmopressin became available in our country and the patient had started desmopressin treatment.

From then on, polyuria and polydipsia had resolved and the dosage was progressively increased to 3x20 mcg/day. He did not have any other chronic disease except hypertension regulated with amlodipin. In laboratory examination, serum Na was 141 mmol/L, K 4.1 mmol/L, urinary density 1014, serum osmolality 291 mOsm/L and urinary osmolality 486 mOsm/kgwater. His anterior hypophysial hormones were normal and magnetic resonance imaging revealed a normal hypophysial gland with a height of 4.3 mm.

Conclusion:

To our knowledge, the longest follow-up time reported in studies or case reports including patients with central DI in the literature does not extend beyond 30 years. Our patient has the longest survival of more than 55 years of which 30 years passed without any medical treatment. This is supportive for the fact that loss of urine can be compensated and water balance can be maintained as long as thirst mechanisms work and water intake is provided.