

A COMPLEX CASE OF COMPLETE CENTRAL DIABETES INSIPIDUS

Halamba Osini Senara Rathnasiri

Grodno State Medical University

Scientific supervisor: PhD, Assoc. Prof. Karpovich Yu. I.

Relevance. Diabetes insipidus is a rare disorder, and each subtype has a distinct pathophysiology. Definitive differentiation requires evaluating urine and serum osmolality and performing a water deprivation test, which remains the gold standard for confirming the condition [1].

Target. To demonstrate the importance of a multidisciplinary approach to tailored diagnostic methods and the necessity of evaluating differential diagnoses before treatment in the context of a unique condition.

Research methods. CASE PRESENTATION

A 52-year-old woman presented with an eight-month history of progressive polyuria, polydipsia, dry skin, and unintentional weight loss. She consumed about 7–8 L/day and urinated every 40 minutes.

The diagnostic conclusion was based on the combined results of the water deprivation test and the desmopressin test. During the water deprivation test, urine osmolality values were 99.9 mOsm/kg and 66.6 mOsm/kg, while plasma osmolality rose above the normal range (306.3–314.5 mOsm/kg). On the following day, a desmopressin test was performed. Baseline urine osmolality was 99.9 mOsm/kg. After administration of 0.2 mg oral desmopressin, urine osmolality increased to 333 mOsm/kg. This confirmed final diagnosis of complete central diabetes insipidus (CDI).

Further diagnostic workup identified several comorbidities, including a right parietal meningioma.

Pharmacologic management included desmopressin to control polyuria. With treatment, the patient reported significant improvement in thirst, nocturia, and overall wellbeing. Fluid intake was regulated according to thirst to avoid overhydration, and daily monitoring of urine output and body weight was implemented.

At discharge, she was instructed to continue desmopressin and lisinopril as prescribed, maintain strict regulation of fluid intake, and monitor diuresis at home.

Results and their discussion. Differential diagnoses of polyuria–polydipsia syndrome included CDI, Nephrogenic diabetes insipidus (NDI), primary polydipsia, gestational diabetes insipidus, solute diuresis, and medication-related causes.

CDI was confirmed through findings: persistent dilute urine during water deprivation despite rising plasma osmolality, a >50% increase in urine osmolality after desmopressin administration and presence of a right parietal meningioma.

NDI was excluded due to normal calcium and potassium levels, absence of nephrotoxic drug exposure, normal renal function, and the response to desmopressin

test. If the increase in urine osmolality desmopressin test was less than 50%, the diagnosis could be complete NDI.

Primary polydipsia was ruled out because the patient had nocturnal polyuria, no psychiatric history, and failed to increase urine osmolality into the expected 300–800 mOsm/kg range during water deprivation.

Conclusions. This case report underscores the atypical presentation of complete CDI in a middle-aged female, manifested with underlying concomitant diseases. The combination of water deprivation and desmopressin testing provided definitive diagnostic clarity, allowing for targeted management with desmopressin and resulting in a favorable clinical response.

LITERATURE

1. Rathnasiri, H. O. S. Multidisciplinary approach to a diabetes insipidus patient with concomitant conditions: a case report / H. O. S. Rathnasiri, Y. I. Karpovich, V. Bogdanovich // International Journal of Research in Medical Sciences. – 2026. – Vol. 14, № 3. – P. 1180–1184.

THE LANDSCAPE OF STABLE DISABILITY AND REHABILITATION IN THE MALDIVES

Hamdhee Hana

Grodno State Medical University

Scientific supervisor: MD, Prof. Surmach M. Yu.

Relevance. Disability affects approximately 9% of the Maldivian population aged five years and above, representing a significant public health challenge. Understanding stable disability within the biopsychosocial framework is essential for developing effective policies and interventions. With ageing populations and increasing chronic conditions globally, robust rehabilitation systems are critical for promoting health, participation, and dignity.

Target. This analysis examines the concepts of stable disability (handicap) and rehabilitation through the World Health Organization's International Classification of Functioning, Disability and Health (ICF) framework, exploring the continuum from disease to impairment, disability, and social disadvantage, while assessing the current landscape of disability services in the Maldives.

Research methods. The paper synthesizes epidemiological data from the Maldives National Bureau of Statistics (2019 HIES survey and 2022 statistics), examines disability organization reports, and analyzes WHO frameworks and legal documents including the Disability Act (2010) [1, 2].

Results and their discussion. Disability arises from multifactorial determinants including medical, biological, social, and environmental factors. Prevalence increases significantly with age—from 4% among children (5-17 years) to 59% among those aged 75+ years. Geographic disparities exist, with atolls showing higher prevalence for