

## **Idiopathic hypodipsic hypernatremia suspected in a Miniature Schnauzer**

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Hypernatremia is rare in conscious animals that have access to water. In fully conscious animals with chronic hypernatremia that have access to water and do not have polyuria, the possibility of hypodipsia with abnormal osmoregulation of antidiuretic hormone release should be considered. This known as Idiopathic hypodipsic hypernatremia has been reported previously in young Miniature Schnauzers.

A 1-year old, 4.9-kg, male Miniature Schnauzer was referred to the Medical Teaching Hospital of Seoul National University with depression, anorexia, and shivering. The owner recognized the dog would not drink water and attempted to encourage fluid intake although it was failed.

On the physical examination, the dog was severely dehydrated and emaciated. Hematologic abnormalities included mild anemia and thrombocytopenia and mild leukocytosis. Biochemical abnormalities included severe hypernatremia (high; >200mEq/L) and hyperchloremia (167mEq/L), azotemia, hyperglycemia, and hypercholesterolemia. Urine specific gravity was 1.033. Plasma aldosterone, basal cortisol and thyroxin level were remained in normal range. A defective central thirst regulation mechanism was suspected as the dog was totally disinterested in drinking water despite the chronically elevated serum sodium concentration.

Normal saline was chosen initially to avoid excessively rapid correction of hypernatremia, which can lead to cerebral edema. The third day of hospitalization, azotemia, hypercholesterolemia, and hyperglycemia resolved and the level of serum sodium and chloride decreased. Clinical signs also improved. The dog has been in apparent good health with controlled fluid intake until now. A few cases of idiopathic hypodipsic/adipsic hypernatremia in a young Miniature Schnauzer reported but this is the first case report in Korea.

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