

성인 여성에서 과량의 소금섭취로 인한 고나트륨혈증 1예

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Severe Hyponatremia by Excessive Salt Ingestion in Healthy Young Women

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Introduction: Most known cases of hyponatremia are due to a loss of water rather than due to exogenous salt intake. Hyponatremia due to sodium excess occurs less frequently. The toxicity of great amount of salt has been known for a very long time. Recently, a case of severe hyponatremia caused by excessive salt intake as folk remedies for 3 months in a patient with stage V chronic kidney disease has been reported in Korea. However, severe hyponatremia in normal young adult with clear consciousness and normal renal function has been reported in Korea yet. We report a case of healthy young women with acute severe hyponatremia caused by excessive salt intakes as folk remedies.

Case: A 20-year-old previously healthy female was came to our hospital with vomiting and diarrhea over ten times. Her height and body weight were 168.1 cm and 52.2 kg. Blood pressure was 128/81 mmHg, heart rates; 75/min, respiration rates; 20/min, and body temperature; 37.3°C. The urine flow rate was about 100 ml/hr at that time of admission. She ingested sodium chloride salt for the purpose of dyspepsia control and weight reduction. After ingestion of excessive salt (about 150g), she presented with vomiting and diarrhea. Her consciousness was clear but complained of generalized weakness. The complete blood counts showed hemoglobin 11.3 g/dL, WBC 10,000 cells/ μ L, and platelet 196,000/ μ L. The results of blood chemistry were as follows: AST 11 IU/L, ALT 9 IU/L, Total protein 6.4 g/dL, albumin 4.5 g/dL, Blood urea nitrogen 5.2 mg/dL, creatinine 0.57 mg/dL. Serum sodium, potassium and chloride were 174 mEq/L, 3.6 and 135 mEq/L. Serum osmolarity was 348 mosm/kg. Urine sodium, potassium, chloride and osmolarity were 440 mEq/L, 125.7 mEq/L, 314 mEq/L and 841 mosm/kg, respectively. On arterial blood gas analysis, pH was 7.32, PaO₂ 93 mmHg, PaCO₂ 36 mmHg, bicarbonate 18.5 mEq/L and O₂ saturation 97%. Her symptoms such as nausea, vomiting and diarrhea improved rapidly with hypotonic saline infusion. Her serum sodium level returned to normal in several days. She recovered completely without any sequelae.

Key Words: 고나트륨혈증, 민간 요법, 소금 섭취
Hyponatremia, Folk remedy, Excessive salt intakes