

## CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

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### Acid-Base Balance-Electrolyte Quiz – Case 44

The loss of 3 L of diarrheal fluid, which is isotonic to plasma, may be associated with all of the following, except:

- a. Hypovolemia
- b. Decreased sodium excretion
- c. Hyponatremia
- d. Increased ADH release
- e. Increased urine osmolality (Uosm)

#### Comment

*The loss of isotonic fluid is followed by hypovolemia leading*

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*to ADH release and subsequently to increased Uosm. On the other hand, urine sodium is less than 20 mEq/L in hypovolemic states. It should be mentioned that since diarrheal fluid is isotonic to plasma, no change in serum sodium levels is expected. However, if the patient drinks increased amount of water, decreased serum sodium levels due to both increased water intake and decreased water with excretion (ADH-mediated) is expected.*

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