

CONTINUING MEDICAL EDUCATION ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Acid-Base Balance-Electrolyte Quiz – Case 68

Which of the following regarding Gitelman syndrome is wrong?

- (a) It is a salt wasting tubular disease
- (b) Fractional chloride excretion (FECL⁻) is >0.5%
- (c) Hypercalciuria is commonly found
- (d) It is associated with kaliuria along with magnesiuria

Gitelman syndrome is the most common genetic tubular disorder characterized by hypokalemia due to renal potassium wasting (K⁺/creatinine ratio in a random urine specimen >18 mEq/g), hypomagnesemia due to increased magnesium excretion (fractional excretion of magnesium >4%) and hypocalciuria (Ca²⁺/creatinine ratio in a random urine specimen <0.07 mg/

mg). The syndrome is due to mutations of the gene encoding the thiazide sensitive Na⁺-Cl⁻ cotransporter (NCC) in the distal tubular cells leading to increased NaCl excretion. Thus, FECL⁻ >0.5% is a common finding.

Corresponding author:

M. Elisaf, Department of Internal Medicine, Medical School, University of Ioannina, 451 10 Ioannina, Greece
e-mail: melisaf54@gmail.com

ARCHIVES OF HELLENIC MEDICINE 2018, 35(6):849
ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2018, 35(6):849

**E. Christopoulou,
T. Dimitriou,
D. Sfairopoulos,
M. Elisaf**

*Department of Internal Medicine,
Medical School, University of Ioannina,
Ioannina, Greece*

Answer: c (hypercalciuria is commonly found)