

SUPPLEMENTAL DATA

RISPERIDONE-ASSOCIATED HYPOCALCEMIA

Letter to the Editor – for publication

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SUPPLEMENTAL TABLE 1. Demographic and other clinical characteristics of the study sample derived from medical files of Psychiatry Clinic of Clinical Centre “Kragujevac”, Kragujevac, Serbia, encompassing the period from January 2004 to September 2009 year.

Variable	Value ^a
Total patients	1245 (100)
Males	770 (61.8)
Females	475 (38.2)
Age	45.5±13.3 years (44.7-46.4, 18-80) ^b
Serum calcium in risperidone users	
Hypocalcemic	2.04±0.04 mmol/L ^c
Normocalcemic	2.27±0.11 mmol/L
Drug treatment ^d	
Benzodiazepines	1214 (92.0)
Typical antipsychotics	613 (46.4)
Selective serotonin reuptake inhibitors	207 (15.7)
Mood stabilizers	204 (15.5)
Selective hypnotics	127 (9.6)
Atypical antipsychotics ^e	89 (6.7)
Tricyclic or heterocyclic antidepressants	86 (6.5)
Angiotensin-converting enzyme inhibitors	68 (5.2)
Beta-blockers	67 (5.1)
Atypical antidepressants	59 (4.5)
Hormones and vitamins	46 (3.5)
Non-steroidal anti-inflammatory agents	41 (3.1)
Antiulcers	32 (2.4)
Nitrates	31 (2.3)
Neurological drugs	23 (1.7)
Inotropics	20 (1.5)
Calcium channel blockers	18 (1.4)
Antiinfectives	14 (1.1)
Antiasthmatics	12 (0.9)
Digestives	11 (0.8)
Diuretics ^f	6 (0.5)

^aRepresent absolute numbers (percentage) and values in denoted units.

^bThe mean age ± standard deviation (95% confidence interval, range).

^cStudent's test, $t=-13.8$, $df=326$, $p<0.001$.

^dFrom the total of 1320 record sets (100%); no drugs, except calcium channel blockers as a group, was significantly associated with hypocalcemia.

^eOther than risperidone.

^fSmall doses as antihypertensives.

SUPPLEMENTAL INFORMATION 1. Adjusting for confounders.

The confounders included in multivariable logistic regression were: age, gender, drugs (prescribed in the hospital) and data sets (time period of serum sample analysis). Other risk factors for hypocalcemia and osteoporosis have been looked at, according to a literature reminder.^{1,2} However, they have not been included as confounders due to missed data (not routinely performed in the Psychiatry Clinic of our hospital), inappropriately described or ignored in medical files or available only for minority of study subjects. They were as follows: nutritional status (slender, anorectic, malabsorption), poor habits (smoking, alcoholic), musculoskeletal status (prolonged rest, family history of osteoporosis, past low-trauma fractures), endocrine and gonadal status (thyrotoxicosis, pseudo/hypoparathyroidism, hyperparathyroidism, Cushing's syndrome, hyperprolactinemia, early menopause, amenorrhea), previous drug use (corticosteroids, aluminum containing antacids, rifampicin, orlistat, glucocorticoids, bisphosphonates), calcium homeostasis parameters (parathyroid hormone, vitamin D, calcitonin, thyroxine, magnesium, phosphate, alkaline phosphatase, serum albumin) and other conditions (chronic renal failure, primary biliary cirrhosis, rheumatoid arthritis, myeloma, mastocytosis, overhydration, osteomalacia). Acute conditions like pancreatitis, acid-base disorders and rhabdomyolysis were exclusion criteria. More than 80% study subjects was active, medium-to-heavy smokers.

1. Longmore M, Wilkinson IB, Turmezei T, Kay Cheung C. Oxford handbook of clinical medicine. 7th ed. Oxford: Oxford University Press, 2007.
2. Lourenço R. Drug-induced fluid and electrolyte disorders. *EJHP Practice* 2008; 14(3): 43-6.

LEGEND FOR SUPPLEMENTAL FIGURE

SUPPLEMENTAL FIGURE 1. The study flow diagram.