Intestinal colonization of residents of long-term care facilities and nursing homes in Braga area with Multidrug-resistant Gram-negatives

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Aim: The aim of our work was the detection of Enterobacteriaceae isolates producing extended-spectrum beta lactamases (ESBL) and isolated with reduced susceptibility to carbapenems, in the intestinal flora of institutionalized-residents in extra-hospital-health-care facilities in Braga region.

Introduction: Care of aging population has been a growing challenge to public-health and health-care providers. Due to the disabilities of older people, there is a growing need for long-term care facilities (LTCF) and nursing homes (NH). This brings a new paradigm for the spread of bacteria showing multidrug-resistance (MDR) to antibiotics.

Methods: Fecal samples of 27 residents of these institutions were collected (September-to-December, 2016). One gram of each sample was suspended in 10 mL of saline and 100 L of the suspension was spread on MacConkey agar with ampicillin (100 mg/L)/cefotaxime (2 mg/L)/meropenem (1 mg/L). Susceptibility to antibiotics was determined by disk-diffusion methods, according to CLSI. ESBL-producers were detected by the double-disk-synergy-test and/or clavulanic-acid addition and PCR was performed for detection of blaTEM, blaOXA, blaSHV, blaCTX-M-group-1, blaCTX-M-group-2, blaCTX-M-group-8, blaCTX-M-group-9, blaCTX-M-group-25, tetA, tetB, aac(3)-II, sul1, aac(6)-Ib and qnrB genes.

Results: The study revealed 6 ESBL-producing Enterobacteriaceae colonizing 2 residents in LTCF (2-Escherichia coli/1-Klebsiella, Enterobacter, Serratia and Citrobacter (KESCgroup)) and 3 residents in NH (2-Escherichia coli/1-KESCgroup). Isolates showed positive for blaCTX-M-group-1, blaCTX-M-group-9, blaTEM, blaSHV, blaOXA, tetA, tetB, aac(3)-II, sul1 and aac(6)-Ib. These isolates showed resistance to non-beta-lactam antibiotics, namely to tetracycline, ciprofloxacin, trimethoprim-sulfamethoxazole, gentamicin and amikacin. We detected 6 MDR-bacteria isolates and 1 isolate with reduced susceptibility to carbapenems.

Conclusion: Our results show the dissemination of ESBL-producing-Enterobacteriaceae in intestinal colonization of LTCF/NH patients, who may act as vehicles of MDR-bacteria within the health-care-facilities and community.

http://dx.doi.org/10.1016/j.pbj.2017.07.134

PS105

Headache among medical students in Bukovina Region of Ukraine

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Aim: To study the prevalence of headache among medical students in Bukovina region of Ukraine.
Introduction: Headaches are the most prevalent neurological disorder and among the most frequent symptoms among medical students. Headache disorder is a major public health issue and is a great burden for a person, health care system, and a society. Identifying of headache risk factors is necessary for treatment and effective prevention.

Methods: A cross sectional study has been conducted in duration from 30th of January to the end of March 2017. 146 students of Bukovinian State Medical University aged 19–26 years were interviewed by using specially designed questionnaires. All students with a headache who completed questionnaires were examined by neurologist. The type of headache was determined according to the diagnostic criteria of the classification of the International Headache Society, 2003.

Results: Our study has found that headaches bother 121 (82.8%) students. Among respondents periodic headache was observed in 71.9% (105 students), 16 (10.1%) students experienced chronic headaches that bothered them more than 15 days a month. Among girls the prevalence of headache was significantly higher than among men – 62.1% and 38.9% respectively. Among the students the most frequent headache (58.7%) was tension headache, 9.1% of respondents had migraine headache, 32.2% had other types of headaches. According to the students’ responses the most prevalent causes of headache were stress – 36%, sleep disturbance – 20%, and weather changes – 14%. The other causes included skipping meals – 11%, tea or coffee overdrink – 8%, alcohol consumption – 6%, and menstrual cycle disturbances in 2% students.

Conclusion: By means of the research there was found a high prevalence of headaches among medical students. There was determined the prevalence of primary cephalgias, namely, migraine without aura and episodic tension-type headaches. There was shown a lack of awareness of students about the causes of headache reflected in inadequate symptomatic treatment in most cases.

http://dx.doi.org/10.1016/j.pbj.2017.07.137

PS194

New health problems: Assessment of nutritional and metabolic profile from indigenous citizens in the reserve park of Xingu

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Aim: To identify the prevalence of metabolic syndrome, dyslipidemia, systemic arterial hypertension and type 2 diabetes mellitus in the adult population.

Introduction: In the last 20 years, there have been many changes in the way of life of the Indians of the Xingu Indigenous Park (PIX), resulting from their contact with our society. Factors such as the increasing consumption of processed foods in substitution of the traditional diet based on natural products, the reduction of physical activity by the incorporation of technology and the monetarization of the economy have produced changes in the epidemiological profile of these populations. Previously non-existent diseases like type 2 diabetes mellitus, systemic arterial hypertension, obesity and dyslipidemias have been increasingly observed. In this work, preliminary results of data collected between February and March 2017 are presented.

Methods: Individuals over 18 years old of both sexes undergoing physical examination (clinical and anthropometric), bioimpedance test to evaluate the percentage of body fat and blood collection by digital puncture for lipid profile and fasting glucose of 8–12 h.

Results: The metabolic profile of 188 indigenous people of the Pavuru polo showed: High index of overweight and dyslipidemia in both populations; high central obesity in females; Increased number of hypertensive and fasting blood glycoselated among men; 25% have intermediate or high cardiovascular risk in the next 10 years among men, almost twice as many women.

Conclusion: Based on the data obtained, we can conclude that the process of socio-cultural transition to which the residents of the 4 villages studied are inserted has a direct impact on their health, making it imperative to indetificate and delineate the magnitude of the problem, seeking to develop strategies for the primary and secondary prevention of diseases related to nutritional and metabolic alterations and their consequences among the people living in the PIX. 1–5

References


http://dx.doi.org/10.1016/j.pbj.2017.07.138

PS149

Late diagnostics of Alzheimer’s disease and other dementias, retrospective research in Vilnius (Lithuania)

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Aim: To gain a deeper understanding around the prolonged diagnosis time for Alzheimer’s disease.

Introduction: The world population is getting older. Correspondingly the number of old age sicknesses (like Alzheimer’s disease (AD), dementias) is rising in the populations. These patients require custody, medicine and that takes a lot of money and resources from the country.

Methods: There were two multiple choice/short answer surveys done. One for doctors (psychiatrists, neurologists, general practitioners) and the other for the the patients care givers. The surveys were administered in the hospitals in Vilnius. The data were evaluated by SPSS program (α = 0.05).

Results: 50 doctors completed the surveys. Doctors emphasize that just about 14% of patients’ care givers are aware of the possibility for the genetic screening for AD and are interested in pursuing it. Moreover, according to the surveys, patients with cognitive disorders seek help when they are about 65–75 years old and 70% of