19. ANTIMICROBIAL SUSCEPTIBILITY OF UROPATHOGENIC *ESCHERICHIA COLI* STRAINS

Tamazlicaru Iulia, Bernaz Olga

Academic Adviser: **Balan Greta**, M.D., Associated Professor, State Medical and Pharmaceutical University „Nicolae Testemiţanu", Chisinau, Republic of Moldova.

Introduction: Urinary tract infections (UTIs) are some of the most common infections experienced by humans, exceeded in frequency among ambulatory patients only by respiratory and gastrointestinal infections. The vast majority of uncomplicated UTIs are caused by the Gram-negative bacillus Escherichia coli, with other pathogens including Enterococci, Staphylococcus saprophyticus, Klebsiella spp. and Proteus mirabilis. The extensive and inappropriate use of antimicrobial agents has invariably resulted in the development of antibiotic resistance which, in recent years, has become a major problem worldwide. In patients with suspected UTI, antibiotic treatment is usually started empirically, before urine culture results are available. To ensure appropriate treatment, knowledge of the organisms that cause UTI and their antibiotic susceptibility is mandatory. Occurrence and susceptibility profiles of E. coli show substantial geographic variations as well as significant differences in various populations and environments.

Objectives: The aim of this study was to determine the prevalence and antimicrobial susceptibility of *E. coli* from clinical samples.

Materials and Methods: Between 2010 and 2013, a total of 1916 samples from hospitalized patients in Republican Clinical Hospital were analyzed for isolation and identification of bacteria and antimicrobial susceptibility testing. E. coli was isolated from 542 (42.7%) samples. Bacterial isolates were identified by standard biochemical tests. Antibacterial susceptibility test was performed by the disc diffusion method was performed according to NCCLS (National Committee for Clinical Laboratory Standards).

Results: *E. coli* was isolated from 542 (42.7%) samples. High resistance rates to cefazolin (87.5 %), ampicillin (52.0%), cefepime (62.0%), moxifloxacin (68.0%) were documented. However, significantly high degree of sensitivity rates to netilmicin (90.0%), norflaxocin (82.9%), imipenem (93.0%), meropenem (90.0%), chloramphenicol (95,2%).

Conclusions: *Escherichia coli* is the leading cause of urinary tract infections in humans. A rise in bacterial resistance to antibiotics complicates treatment of infections. The results of this study show high rates of antimicrobial resistance to cefazolin, ampicillin, cefepime, moxifloxacin. High degree of sensitivity rates to netilmicin (90.0%), norflaxocin (82.9%), imipenem (93.0%), meropenem (90.0%), chloramphenicol. Periodic monitoring of antimicrobial susceptibility both in the community and hospital settings is recommended.

Keywords: *Escherichia coli,* antimicrobial susceptibility, urinary tract infections.

20. THE MANAGEMENT OF INTERDISCIPLINARY CONSULTS OF THE GERIATRIC PATIENT WITH CO-MORBIDITIES

Tarus Cristina-Alice, Redei Angela

Academic adviser: **Alexa Ioana Dana,** M.D., Ph.D.; **Irina Cracana**, M.D., Internal Medicine-Geriatrics Department, Faculty of Medicine "Gr. T. Popa" University of Medicine and Pharmacy, Iasi, Romania

Introduction: The geriatric patient must be approached differently due to the association of comorbidities, the difficult anamnesis and the possible cognitive degradation. Therefore, determining the etiology of an acute episode requires a multidisciplinary approach and a competent differential diagnosis.

Material and methods: We present G.A. patient, a 77-year-old female, who was consulted in the Emergency Department and admitted to the Internal Medicine-Geriatrics Department because of syncope associated with dyspnea with orthopnea, atypical chest pain and coughing with mucous expectoration. These symptoms could be due to a number of underlying conditions, such as: Cardio-vascular causes – the patient suffered a DDD pacemaker implantation 2 months ago after atrial

tachycardia with first degree atrioventricular block, second degree atrioventricular block type I and type II, associated with left ventricular dysfunction - we need to consider: a pacemaker malfunction, congestive heart failure or an acute coronary syndrome (cardiology consult); Neurological causes – a possible transient ischemic attack (neurological consult); Orthostatic hypotension as a complication of type 2 diabetes mellitus and/or possibly the effect of antihypertensive medication – the patient is suffering from grade 3 hypertension) (diabetology consult); vertebrobasilar insufficiency secondary to spondyloarthropathy (rheumatology consult); Treatment and lifestyle modification non-compliance, frequent at the geriatric patient (a thorough anamnesis).

Results: The clinical exam, paraclinical tests and interdisciplinary consults established that the treatment and lifestyle modification non-compliance led to an acute decompensated heart failure.

Discussions: The particularity of this case resides in the extensive investigations needed to establish the cause of a syncopal episode in a geriatric patient with multiple comorbid conditions. Medical advice and supervision should be the hallmark of her future life. This case presentation wishes to emphasize the need to open doctor-patient relationships, efficient and complete anamnesis, and also the importance of therapy adhesion.

Keywords: geriatric patient, syncope, treatment non-compliance.

21. RISK FACTORS OF TEENAGE OBESITY

Turcan Veronica

Academic adviser: **Vudu Lorina**, M.D., Associate Professor, Department of Endocrinology, State Medical and Pharmaceutical University "Nicolae Testemitanu", Chisinau, Republic of Moldova

Introduction: Today, nearly a third of youths are overweight or obese, more than 23 million children and teenagers. Since 1980, the obesity rate has more than doubled (from 5.0% to12.4%) among children aged 2-5 years, almost tripled (6.5% to 17%) among children aged 6-11, and more than tripled (from 5.0% to 17.6%) in adolescents aged 12-19 years both in developed countries and in the developing ones. According to WHO, the prevalence of teenage obesity and overweight, in Romania is 10.6% for girls and 18.6% for boys. According to national data, in Republic of Moldova, in 2012, there were 3171 cases of obesity in children aged 0-18 years, of which 969 new cases. Incidence is 13.16 and prevalence is 43.06 cases per 10,000 population. It was necessary to study this problem in our region. So the purpose is to study risk factors of obesity in adolescents from Pedagogical College "Vasile Lupu" in Orhei and Colleges of Medicine in Orhei and Chisinau.

Materials and methods: The study group consisting of 250 adolescents from Pedagogical College "Vasile Lupu" in Orhei and Colleges of Medicine in Orhei and Chisinau was divided into 3 groups depending on BMI and sex. For obesity body mass index (BMI) have to be at or above the 95^{th} percentile for gender and age, while for overweight at or above the 85^{th} but below the 95^{th} percentile and for normal weight BMI from 5^{th} to 85^{th} percentile. It was a clinic-statistical retrospective study and it was conducted for the period of 2013-2014. There were developed two questionnaires, one for teens and one for parents, which included questions on anamnesis, food investigation, the investigation of physical activity and harmful habits. BMI was calculated using BMI Calculator Excel. Statistical analysis using t-Student test. CI = 95% if $p < 0.05$ and OR.

Results: In the study group of 250 adolescents aged 15-18 years from the Pedagogical College "Vasile Lupu" and College of Medicine in Orhei and Chisinau, the frequency was 14.4% overweight and obesity frequency was 17.6%. Overweight was presented mainly in girls 10.4% and obesity cases in boys 11.2%. At the age of 17 to 18 years there has been a progressive increase in body mass as both girls and boys. The analysis of results and the identification of risk factors was performed using the values obtained for $p<0.05$ and $OR>1$.

Conclusion: Risk factors for obesity in teenagers have been identified: the presence of obesity in first-degree relatives, the small number (<2) meals per day, eating fast food, lack of physical activity, time spent watching TV and not respecting the sleep-wake.

Keywords: Teenagers, obesity, risk factors