sprouting of neovessels but also can provoke net destruction of collagen in the shoulder regions of fibro-atheromas and thus contribute to the weakening of the fibrous cap and precipitate transition to an unstable lesion, plaque rupture, leading to myocardial infarctions or strokes. Furthermore, specific MMPs have been shown to enhance angiogenesis by releasing ECM-bound angiogenic growth factors.
Conclusions. By providing pathological angiogenesis MMPs may induce plaque growth, maintenance or destabilizing of the atherosclerotic plaque.
Key words: atherosclerosis, angiogenesis, matrix metalloproteinases

232. STUDY OF THE EPITHELIO-MESENCHYMAL TRANSITION PROCESS IN THE PATHOGENESIS OF GASTROINTESTINAL TRACT ENDOMETRIOSIS

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Introduction. Epithelial – mesenchymal transition (EMT) endows cells with migratory and invasive proprieties, a prerequisite for the establishment of endometriotic lesions. The role EMT might play in the pathophysiology of endometriosis is still unknow. Therefore, we examined four markers for EMT in endometrium and endometriosis: E – cadherin + Vimentin, double reactions and simple reactions Twist and N – cadherin.
Aim of the study. The role EMT in the pathophysiology of endometriosis.
Materials and methods. During a period of five years (2012 – 2017) we analyzed 7 cases of gastrointestinal tract endometriosis: appendix (1case), colon (5 cases), ileum (1case). The material was processed according to the classic histological technique by inclusion in paraffin. The 3 μm sections obtained were stained with Hematoxylin – Eosin and Masson's trichrome stains. Another sections were dewaxed, rehydrated and processed for immunohistochemistry using as primary antibodies monoclonal antibodies Vimentin and mouse monoclonal antibody N – cadtherin, E – cadherin, Twist.
Results. Immunohistochemically, we aimed to change the immunophenotype from epithelial to mesenchyme in gastrointestinal endometriosis by analyzing the most important markers of the transition process. In endometriosis and endometrium E – cadherin, Vimentin, N – cadherin and Twist were expressed on protein level. Investigation of E – cadherin / Vimentin coexpression revealed a decrease in E – cadherin reactivity at the site of invasion of gastrointestinal endometriosis with an increase in reactivity to Vimentin together with the increase of the invasion pattern and the increase of the stage of the disease respectively. Twist transcription factor immunoexpression revealed a highly positive expression on the mesenchymal lineage, proving involvement of this transcriptional factor in the invasion process of gastrointestinal endometriosis. N – cadherin was positive in the endometrial glands, showing their differentiation into a mesenchymal phenotype and their migratory potential.
Conclusion: The results of our study confirm involvement of the epithelial – mesenchymal transition process in the pathogenesis.
Key words: endometriosis, gastrointestinal tract, mesenchymal transition

DEPARTMENT OF PHARMACOLOGY AND CLINICAL PHARMACOLOGY

233. THE DEVELOPMENT OF ANTIBIOTIC RESISTANT BACTERIA IN HOSPITALS

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Introduction. Bacterial resistance to antibiotics is a complex phenomenon that defines the ability of microorganisms to survive and multiply in the presence of an antibiotic. This natural process for bacteria threatens to reach an unprecedented extent.
Aim of the study. To evaluate the incidence of pathogenic flora in hospital conditions and the degree of microbial resistance in hospitalized patients.
Materials and methods. The retrospective study carried out within the "Sfînta Treime" Municipal Clinical Hospital comprises a group of 30 patients hospitalized in Therapy II. The study included medical records of patients hospitalized between April and July 2017, aged between 30 and 70 years. The antibioticograms and the treatment of these patients have been studied and interpreted.
Results. The study showed a prevalence of bacterial culture of Streptococcus viridans representing 30% cases, followed by Streptococcus beta haemolyticus and Staphylococcus aureus in 20%, Staphylococcus haemolyticus - 13.33%, E. Coli - 6, 66%. Moxarella catarhalis, Streptococcus pyogenes and Klebsiella oxytoca in a proportion of 3.33% are less significant. The isolated microorganisms from patients in Therapy II section showed increased resistance to antibiotics in the penicillin group - 73.33%, the macrolide group - 36.66%, the glycopoid group - 26.66%, and the cephalosporins group - 16.66 %. Less bacterial resistance is for quinolone groups -10.00%, fenicols - 6.66%, oxozolidones, aminoglycosides and penicillins + beta-lactamase inhibitors in equal proportions of 3.33%.
Conclusions. The study of antibiotic resistant pathogenic flora from patients in Therapy II section showed a prevalence of bacterial culture of Streptococcus viridans, followed by Streptococcus beta haemolyticus and Staphylococcus aureus. Microorganisms isolated from these patients showed increased resistance to antibiotics in the penicillin groups, followed by macrolides, glycopeptides and cephalosporins.
Key words: resistance, antibiotics, microorganisms, antimicrobial

234. ISOTHIOUREA DERIVATIVES - THE NEW GENERATION OF ANTIHYPERTENSIVE DRUGS

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Introduction. One of the major concerns of modern medicine is the use of new, long-acting antihypertensive drugs. Numerous studies have confirmed the importance of correct treatment of hypertension to reduce cardiovascular morbidity and mortality. Physicians now have a choice of a wide range of antihypertensive drugs with numerous evidence of their efficacy, but which often cause side effects limiting their widespread use. Benzituron or S-benzylisothiourea chloride is referred to a new range of hypotensive substances, isothiourea derivatives, able to reduce and to stabilize the level of the arterial blood pressure. The solution of the benzituron, in dosage of 2 mg/kg shows a noticeable hypotensive and antihypertensive action, with duration from 4 to 5 hours.
Aim of the study. To evaluate the effect of benzituron on blood pressure and heart rate on the background of adrenergic receptor blockade with propranolol.