In this study, diet and exercise induced a significant reduction of BMI, SBP, waist circumference, ratio T. Chol/HDL-C, and apoB, on both groups. Results were similar in menopausal and fertile women.

Key Words: Obesity, Hypertension, Menopause

P-617
CHANGES OF RESPIRATORY SYSTEM FUNCTIONAL STATE IN FEMALE HYPERTENSIVE PATIENTS

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In order to evaluate the respiratory system functional state in female hypertensive patients we studied 107 patients (mean 49.5 ± 2.7 years old) with mild (1st group), moderate (2nd group) essential hypertension (EH) and neurocirculatory hypertensive asthenia (3rd group), for control we observed 30 healthy subjects (4th group). All patients were not suffering from any chronic respiratory disease in anamnesis and were randomized to the group dependently from the blood pressure levels. Parameters of the respiratory system function were examined by the method of computer spirometry ("Eager", Germany).

Such predictive and active parameters of computer spirometry as Maximum Voluntary Ventilation (MVV), Forced Vital Capacity (FVC), Forced Expiratory Volume after 1s (FEV 1), FEV 1 as % of Inspiratory Vital Capacity (FEV1%VCIN), FEV 1 as % of FVC (FEV 1 E), and Peak Inspiratory Flow (PIF) were not significantly different between 1st, 3rd and 4th observed groups. But in the 1st and a little less (p < 0.05) in the 3rd groups data of active parameters mentioned above were insignificantly decreased (p > 0.05) comparatively to healthy subjects. In patients of the 2nd group such active parameters as MVV, FEV 1%VCIN, FEV 1 E were uncertainly lower (p > 0.05) than in the 1st and 3rd groups, but were still border-normal with tendency to forming combined respiratory and heart failure. Thus, a tendency for aggravation of the active parameters of respiratory function in female patients with arterial hypertension is dependent on the blood pressure levels.

Key Words: Respiratory function, Hypertension, Female patients

P-618
THE EFFECT OF PROPIVERINE ON CARDIAC SAFETY IN HEALTHY FEMALE SUBJECTS: A DOUBLE-BLIND, PLACEBO-CONTROLLED RANDOMIZED STUDY

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The influence of propiverine hydrochloride (p-HCL, Mictonorm®, Detrinorm®, Propinorm®, BUP-4®) on cardiac safety is currently under evaluation as latest in vitro results indicate a potential Ca2+ - and K+ -channel inhibitory property of p-HCL, which may prolong myocardial repolarization (MR). The aim of the study was to assess potential effects of p-HCL on MR using QTc-interval, QT-dispersion and shape of T-wave as surrogate parameters in healthy female subjects, aged between 45-60 years.

24 healthy female subjects were enrolled and treated with p-HCL and placebo during two treatment periods of six days each (cross-over), separated by a washout period of at least 14 days. ECGs were recorded under strictly controlled resting conditions at predose, 1, 2, 4, 6, 8, 12 and 24 hrs post dose on days 1 and 6 and 7 days after the last intake of study medication, at corresponding time points, in each treatment period. Safety was assessed by investigation of ECGs, vital signs, clinical laboratory, adverse event monitoring (AEs), and physical examination (PE).

The present data revealed no effect of p-HCL on myocardial repolarization in healthy female subjects. It may therefore be concluded that p-HCL does not raise concerns on cardiac safety in healthy subjects. P-HCL was well tolerated with respect to vital sings, clinical laboratory, AEs and PE.

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Key Words: Cardiac safety, propiverine hydrochloride, healthy female

P-619
BLOOD PRESSURE PRODUCES DELETERIOUS EFFECTS IN GENITAL STRUCTURES OF FEMALE SPONTANEOUSLY HYPERTENSIVE RAT

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Emerging knowledge from clinical and experimental studies provides a new insight for understanding the pathophysiology of female sexual dysfunction in patients with arterial hypertension. The aim of the present study was to evaluate possible morphological alteration in clitoris and vagina from spontaneous hypertensive rats (SHR) and compared with normotensive Wistar-Kyoto (WKY) rats. Twelve-week-old female SHR and WKY rats, were studied during six months. G1 Control WKY (n = 10) and G2 SHR (n = 10). Systolic blood pressure (SBP) was recorded monthly. At end of the experiment, clitoris and vagina were dissected out and processed by Masson’s trichrome, monoclonal anti-a-smooth-muscle actin, anti-collagen type I and type III, and anti TGFb1. Histomorphometric evaluation revealed that SHR presented higher amount of clitoral cavernous smooth muscle (20.7 ± 6.9 % versus 7 ± 4.4 %; p < 0.01), as well as vascular smooth muscle (16.1 ± 3.6 % versus 9 ± 2 %; p < 0.01); higher TGFb1 in clitoral vessel wall (2.7 ± 1.4 % versus 1.4 ± 0.5 %; p < 0.01); higher wall/lumen ratio (p < 0.01) in both vaginal and clitoral vessels; and remarkable interstitial fibrosis (60.7 ± 4.9 % versus 38.6 ± 2.7 %; p < 0.01), expressed by a higher amount in interstitial collagen type III and I (p < 0.01) in both clitoris and vagina, when compared to WKY rats. In addition, nerve fibers from clitoral and vaginal tissue in SHR showed a notable fibrosis at perineurium and endoneurium. SHR showed positive correlation between SBP and clitoral cavernous smooth muscle (r = 0.87 p < 0.01); SBP and fibrosis in clitoris (r = 0.81 p < 0.01); and SBP and collagen type I and III (r = 0.92 p < 0.01; r = 0.84 p < 0.01) in clitoris respectively. Similar findings were observed between SBP and collagen type I and III in vagina (r = 0.68 p < 0.05; r = 0.75 p < 0.05). According to these results we conclude that SHR present morphologic changes in clitoral vessels as well as in clitoral cavernous space, which have a high positive correlation with the high blood pressure level. Moreover, the increase in extracellular matrix expansion affects not only the clitoral and vaginal interstitium but also the nerve structures from both clitoris and vagina.

Key Words: Female Sexual Dysfunction, Arterial Hypertension, Spontaneously Hypertensive Rats