

Comparison of cardiac findings before and sixth month of treatment

		Before treatment	Sixth month of treatment	p value
ECHO	EF (%)	62,3±3,3	59,9±5,9	0,002
	E (cm/sc)	75,8±17,6	77,5±20,9	0,55
	A (cm/sc)	77,4±19,1	86,0±18,0	<0,001
	E' (cm/sc)	12,5±3,6	10,7±2,9	0,001
	A' (cm/sc)	11,5±2,4	11,3±3,0	0,58
	E/A	1,01±0,3	0,9±0,2	0,03
ECG	E/E'	6,6±2,9	7,7±3,3	0,04
	Rate (min)	85±13	88±13	0,02
	PR (msc)	143±16	147±20	0,09
	QRS (msc)	81±11	84±14	0,17
	QT (msc)	340±27	346±33	0,19
	QTd (msc)	12±9	14±9	0,39

PP-128

The Evaluation of Aneurysm Dimensions in Air Crews with Interatrial Septal Aneurysm

Cengiz Ozturk¹, Tolga Cakmak², Suleyman Metin², Ahmet Sen², Ahmet Akin²
¹Eskisehir Military Hospital, Cardiology and Aeromedical Centre, Eskisehir,
²Gulhane Military Medical Academy, Aerospace Medicine, Eskisehir

Objective: We aimed to evaluate the measurement of dimensions of interatrial septal aneurysm (IASA) detected in aircrew during 5 year aircrew periodic medical examination.

Material-Method: Data of 23 aircrew (age range 23-46 years) with IASA, detected during periodic examination, were retrospectively collected. They were divided into 2 groups: group 1 (pilots, n=13) and group 2 (non-pilot aircrew, n=10). In both groups bulging to rightward or/and to leftward of atrial septum was measured by using transthoracic echocardiography (TTE), apical 4-chamber view. The relation between the dimensions of aneurysm and the paradoxical movement was examined and compared. Associated diseases were also noted. Obtained data were analyzed using SPSS version 15.0.

Results: For group 1 and 2; the average ages were 35.54±7.39, 33.50±7.17; diameters of aneurysm were 20.38±4.70 mm (10-28 mm), 21.30±5.64 mm (14-30 mm); the bulging of aneurysm were 10.08±2.87 mm (7-17 mm), 9.30±4.16 mm (6-20 mm) respectively and no statistically differences were found between them (p<0.41, p<0.926, p<0.271). 4 aircrew out of the both groups had paradoxical movement in their IASA. All of them were asymptomatic and none of them had cryptogenic stroke history. TTE revealed 3 pilots and 4 non-pilots had patent foramen ovale showing left-right shunt with 5-10 microbubble formations.

Conclusion: Decompression sickness, microbubble formation that passes through a defect in the interatrial septum and IASA have significant roles in development of stroke in aircrew. In our study we compared the dimensions of aneurysm between pilot and non-pilot aircrew groups with IASA and didn't find any statistically difference.

PP-129

Is Atherosclerosis and Osteoporosis Single Disease?

Sekib Sokolovic

Heart and Rheumatism Clinic, University Clinical Center Sarajevo, Bosnia and Herzegovina

Introduction: Atherosclerosis and osteoporosis have been considered as separate disease. And the correlation between atherosclerosis and osteoporosis has been investigated recently in a numerous clinical studies. Since the growing scientific evidence have shown a lot of underlying parallel pathophysiological mechanisms and due to similarity in risk factors and to treatment of one disease that affect the other, idea has come out that this me be a single disorder. Many common risk factors for osteoporosis and atherosclerosis can coexist together in postmenopausal women, glucocorticoid induced osteoporosis and elderly men. As both chronic degenerative diseases, the incidence of CVD and osteoporosis increase for both gender and with age. The objective of this paper was to study the eventual association of joint cardiovascular risk factors and osteoporosis.

Material-Method: Total of 104 patients suffering from definite glucocorticoid induced osteoporosis (GIO) and postmenopausal osteoporosis (PO) were examined for CV risk factors, concomitant diseases and the use of glucocorticoids. Cardiovascular risk factors were analysed in all osteoporotic patients and distributed in a two separate groups. The retrospective clinical study was done. There were 93 females (89,6%) and 14 males (10,4%). The average age in total was 63,16 years. In the female group the average age was 65,35 years (range 39-90y), while in the male group it was 64,17 years (range 46 - 78y). The most frequent cause of OP was glucocorticosteroid induced osteoporosis (GIO) observed in 71 (68,27%) of patients and 33 (31,73%) patients with postmenopausal osteoporosis. The following cardiovascular risk factors were determined in this study: Smoking, Arterial Hypertension, Cholesterol, Tryglycerides, Glucocorticosteroids, diabetes, and other concomitant diseases and BMD.

Results: The results from this study have shown the significant influence of cardiovascular risk factors and concomitant disorders on osteoporosis. Majority of patients were females and within the age of approximately 65 years old. The major disorder was rheumatoid arthritis in 52 patients and thyroid disease was also very common. The lipid profile was increased in 61 patients, smoking in 42 individuals and arterial hypertension in 46 patients. The glucocorticosteroid was used by more than half of the study population in 67 patients or 65,7%.

Conclusion: The results obtained from our study have shown that there is association between cardiovascular risk factors and osteoporosis in lipid abnormalities, smoking, arterial hypertension, gender, age, underlying disorders and use of corticosteroids. This study and many other studies from other authors have brought us to conclusion that atherosclerosis and osteoporosis may be the one single disease. More epidemiological and investigative studies are needed to prove this hypothesis.

PP-130

Predictive Value of Increased Ankle-Brachial Index in Contrast Nephropathy Development Due to Coronary Angiography

Serkan Yildirim¹, Mehmet Kayrak¹, Mehmet Doğuşcan Eriş², Hakan Akıllı¹, Yalçın Solak³, Ahmet Lütfi Serterdemir¹

¹Necmettin Erbakan University Meram Medicine Faculty, Konya, ²Kilis State Hospital, Kilis, ³Karaman State Hospital, Karaman

Aim: In this study, whether ankle-brachial index (ABI) is an independent predictor for acute kidney injury (AKI) in patients taken to the KAG laboratory for coronary procedures is aimed.

Methods: Before the coronary procedures in KAG laboratory; serum creatine (SCR), glomerular filtration rate (GFR), and doppler derived ABI were measured in all patients that are accepted to either Cardiology Department or Coronary Intensive Care Unit of Necmettin Erbakan University between May 2012-March 2013. Patients' SCR were monitored until at least 48 hours after the procedure and increases bigger than 0.3 mg/dl in this value were considered as AKI.

Findings: The ABI means of patients who developed AKI and those who didnot were found 1.17±0.12 and 1.22±0.17 respectively (p<0.008). ABI>1.3 is about 3 times more in patients who developed AKI than the group did not (36.8% vs 13%, p<0.001). In this study, independent predictors of AKI were ABI (odds: 11.4 (1.81-72.84 with 95% CI), p=0.01), EF (odds: 0.91 (0.85-0.98 with 95% CI), p=0.007), and preoperative GFR (odds: 0.96 (0.93-0.98 with 95% CI), p=0.001). It is determined that ABI>1.30 shows the development of AKI with 36.8% sensitivity and 87.5% specificity. (Positive predictive value: 25.3, negative predictive value: 92.3).

Discussions: In many previous studies, patients with increased ABI (arterial stiffness) were detected to have an increased cardiovascular mortality incident. Increased AKI in patients with high ABI whom are detected during this study could be a reason behind the increase in cardiovascular mortality in this hospital.

Results: To foresee the contrast related AKI development which is a feared complication is important and in this regard, ABI>1.3 may be a marker.

Comparison Of Patients Who Developed AKI With Patients Who Did Not Develop AKI

	AKI (-) n:494	AKI (+) n:57	P
Age	61±11,42	65±9,80	0.002
Female sex n (%)	179 (36,2)	25 (43,9)	0.26
BMI	27,5±3,3	28,5±4,4	0.04
DM n (%)	152 (30,8)	23 (40,4)	0.14
HT n (%)	297 (60,1)	37 (64,9)	0,48
Smoking (%)	187 (38,1)	25 (44,8)	0.32
Prior KAG n (%)	210 (42,5)	21 (36,8)	0.41
SBP	124,55±21,40	118,95±26,13	0,12
DBP	73,83±15,12	69,56±17,43	0,08
Basal Cr	0,94±0,84	1,65±1,46	<0,001
GFR before the procedure	99,30±35,34	64,23±30,98	0,008
EF	51,93±10,65	45,42±10,51	<0,001
ABI	1,17±0,12	1,22±0,17	0,008
ABI>1,3 n (%)	64 (13,0)	21 (36,8)	<0,001
Total contrast used	96,09±39,01	102,89±37,40	0,21
Total procedure time	26,43±11,9	29,47±12,77	0,09
Total Gensini	17,25±20,68	23,63±23,57	0,07
ACE inh/ARB n (%)	346 (70,1)	37 (64,9)	0,48
HGB	13,76±1,90	12,97±2,44	0,004
Uric acid	6,56±1,19	7,60±0,83	<0,001