### PP-080

### Association Between Blood Group Antigens And Rheumatic Valve Involvement And Severity In Endemic Areas

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**Background:** Rheumatic valve disease is an important public health problem in developing countries. We sought to evaluate the possible role of blood antigens as risk factors for rheumatic valve disease.

**Methods:** Two hundred fifty four patients with severe rheumatic mitral and/or aortic valve disease in whom referred to surgery were enrolled to the study. Blood groups of the patients were determined using standard haemagglutination tests. Control group was consisted of 2668 healthy volunteers who donated blood to the Turkish Red Crescent in Gaziantep region.

**Results:** There were 216 patients with aortic valve involvement and 249 patients with mitral valve involvement. 175 patients had mitral stenosis, 96 patients had severe mitral regurgitation and 61 patients had severe aortic regurgitation. Blood groups of the patients were as follows: Group A=42.9%, Group B=19.2%, Group AB=8.6%, Group O=29.1%. Blood groups of the control group were Group A= %40.8, Group B=%16.4, Group AB=%7.6, Group O=%35.1. There was not any significant difference between blood groups of patients and controls (p=0.141).

Conculusion: There is no association between the rheumatic valve disease and healthy individuals living in Southeastern Anatolian endemic region in terms of their profile of blood group antigens. Blood group is not seem to be a risk factor for rheumatic valve involvement or the severity of the disease.

### PP-081

# Pathologic Echocardiographic Findings In Turkish Adults: An Epidemiologic Observational Study

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Introduction: Epidemiology may define as a discipline that researches the reasons of health and disorders and investigates the social aspect of diseases. Assestment of cardiovascular risc factors by epidemiologic studies caused new insights in management of cardiovascular disease. Nowadays, one of the most valuable non-invasive technique in cardiology is echocardiyography. Echocardiyography is used in diagnosis and follow-up of congenital and acquired cardiovascular disease and in assessment of cardiac structure and function. There are many studies that used echocardiography to evaluate cardiovascular diseases but the number of the epidemiological studies is scarce. The aim of this study is to research the frequency of cardiovascular diseases detected by echocardiography.

**Methods:** The study was conducted in May and June, 2010 in the Social health center located in Yigilca, the north-east of Duzce. 400 adult subjects (>17 years old) from each family physician representatively stratified for sex, age and for rural-urban distribution were randomly assigned and invited to participate the study. A total of 2231 subjects with a mean age of  $50\pm15$  (age range 18 to 92) were interviewed. Data were obtained by measurements and echocardiography.

**Results:** There was significant difference between men and women in all measurements except DT, ET ve PAB values (p < 0.01) Table 1. The prevalence of diastolic dysfunction (DD) was 67.6%. There was no significant difference between men and women (p > 0.05). The prevalence of ascending aort dilatation was 3.2%, heart failure was 1.7%, bicuspid aort was 0.8%, aortic stenosis was 3.4%. Aortic regurgitation tricuspid regurgitation and pulmonary regurgitation was detected in 38.9%, 52.8%, 12.4%. Unlike the other studies, MVP prevalence was found to be %0.2.

Conclusion: Because it is a portable and cheap method, the rate of using ecocardiography in assessment of cardiovascular diseases increased. It should not ignore that by early detection and treatment, progression of diseases can be prevented and life quality of patients can be improved. Further epidemiological studies are needed to get more information about this issue.

Table 1. Echocardiographic parameters of subjects

| Variables                     | Mean | Standard deviation |
|-------------------------------|------|--------------------|
| LVEDD (cm)                    | 4.64 | 0.53               |
| LVESD (cm)                    | 3.02 | 0.48               |
| LA (cm)                       | 3.41 | 0.47               |
| Ejection fraction (%)         | 63.0 | 5.85               |
| PAP (mm Hg)                   | 22.2 | 11.5               |
| Ascending aorta (cm)          | 3.02 | 0.39               |
| Interventricular septum (cm)  | 1.01 | 0.18               |
| Posterior wall thickness (cm) | 0.97 | 0.15               |
| E wave                        | 0.73 | 0.21               |
| A wave                        | 0.72 | 0.19               |
| DT (msn)                      | 201  | 51.02              |
| IVRT (msn)                    | 107  | 37.4               |
| IVCT (msn)                    | 57   | 26.8               |
| ET (msn)                      | 266  | 41.8               |

DT, deceleration time, ET, Ejection time, IVCT, Isovolumic contraction time, IVRT, Isovolumic relaxation time LA, left atrial diameter, LVEDD, left ventricular end-diastolic diameter; LVESD, left ventricular end-systolic, PAP:Pulmonary artery pressure

### PP-082

## Effects of Herbal Medicine Use in Medication Adherence of Cardiology Patients

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Introduction: Despite advencements of modern medicine, plants have been used as medicines widely. Medication adherence is an indispensible part of drug therapy, and non-adherence is associated with increased mortality, morbidity and treatment costs. Disbelief or dissatisfaction with conventional medicine in terms of effectiveness or safety may play a role in preference of herbal medicines over conventional ones, and decrease medication adherence. However, effect of herbal medicine use in medication adherence have not been evaluated so far. Therefore, we conducted a cross sectional survey in order to investigate the effect of herbal medicine use in medication adherence.

**Methods:** All patients admitted to the outpatient cardiology clinics, who had been prescribed at least one cardiovascular drug before, were asked to complete a questionnaire. Three hundred and eighty accepted our offer and were enrolled into our study after giving informed consent. The participants were asked if they have been using any herbals with an expectation of beneficial effect on health. Aims and reasons for preference of herbals were also noted. Medication adherence were measured by using Morisky Scale (table 1). High adherence was defined as a Morisky score <2, and a score  $\ge$ 2 was accepted as low adherence.

Results: Totally 390 patients, 214 (54.9%) males and 176 (45.1%) females, participated in our study. Mean age of the participants were 58.9 ( $\pm$  10.3). Among the participants, 266 (68.2%) had hypertension, 180 (46.2%) had hyperlipidemia, and 116 (29.7%) had diabetes mellitus. A hundred and sixteen (29.7%) of the participants had been consuming herbals. Thirty nine patients used herbals in a hope to reduce high cholesterol, 35 to maintain general cardiac health, 31 to protect hearth vessels and 19 for hypertension. Sixty six patients used herbals because they believe herbals are natural and thus they are harmless. Only 9% of the patients informed their doctors about their herbal use. Furthermore, 12.9% knew herbals may have side effects, and 11% knew herbals may have drug interactions. Age, gender and presence of hypertension, diabetes mellitus and hyperlipidemia were similar between herbal users and nonusers. The median Morisky score was significantly higher in herbal users than herbal nonusers (p<0.001). Rate of low adherence, according to the Morisky Scale. was also higher in herbal users (61.2% vs. 29.9%, p<0.001). In stepwise multivariate logistic regression analyze, herbal use was significantly associated with low medication adherence (OR:3.76, 95% CI 2.36-6.09, p<0.001).

Conclusion: Medication adherence was worse in herbal drug users and herbal drug use is associated with low medication adherence. Despite having side effects, drug interactions and association with low medication adherence, herbal drugs are used widely by cardiology patients. Physicians should be vigilant about the issue and patients should be informed adequately about risks of herbal remedies.

## Morisky Scale

| Do you ever forget to take your medicine?   |  |
|---|--|
| Are you careless at times about taking your medicine?                                       |  |
| When you feel beter, do you sometimes stop taking your medicine?                            |  |
| Sometime if you feel worse when you take the medicine, do you stop taking it?               |  |
| One point given for every YES answer. 0-1 points: high adherence, 2-4 points: low adherence |  |