

Summaries of Articles

Editorial

An Overview on the Last Two Years of the Archives of Turkish Society of Cardiology

A. Onat

During the past two years 100 out of 130 articles submitted were published in the Archives of the Turkish Society of Cardiology which implies a rejection rate of 23 %. In addition to three articles received from abroad, 97 papers originated from 20 different cardiac centers in Turkey. Not only was there any delay in the appearance time of the journal issues, but the speed of publication of the articles was very high, namely slightly less than 4 months, despite the need for a revision of the great majority of incoming manuscripts.

Clinical Investigations

Relationship Between Venous Oxygen Saturation and Cardiac Index After Open Heart Surgery

S. F. Katircioğlu, Z. Çatav, İ. Y. Zorlutuna, O. Taşdemir, K. Bayazıt

One hundred patients who underwent coronary bypass surgery were studied to investigate the relationship between SvO₂ and CI. After admission of patients to the intensive care unit SvO₂, CI, VO₂ were measured every hour within the first six hours. When the changes of SvO₂ were compared with CI and VO₂, there was very weak correlation between SvO₂ and the other parameters. Correlation coefficient between CI and SvO₂ was 0.15 and that between VO₂ and CI whereas no significant change was noticed in SvO₂. In conclusion SvO₂ was not predictive of CI in the postoperative period after open heart surgery.

Assessment of Contrast Ventriculography, 2D-Echocardiography and Radionuclide Ventriculography in the Diagnosis of Left Ventricular Aneurysm and Thrombus

A. Baltay, N. Gültekin, S. Üner, M. Öztürk, İ. Eren, H. Doğar, C. Demiroğlu

Fifty (46 male and 4 female) patients, who had ischemic heart disease and left ventricular (LV) aneurysm as demonstrated by coronary angiography and contrast ventriculography (CV), were studied with radionuclide ventriculography (RNV) and two dimensional echocardiography (2DE) to determine the value of RNV and 2DE in disclosing LV aneurysm and thrombus within the aneurysm and to evaluate the global function as compared to CV findings. In patients who underwent operation, we investigated the reliability of CV RNV and 2DE in demonstrating LV aneurysm and thrombus. We found that though none of the techniques, including CV, was absolutely accurate in demonstrating LV aneurysm, RNV and 2DE had almost equal usefulness in this respect. RNV and CV showed strong correlation in the estimation of LV ejection fraction. Furthermore 2DE was more reliable than CV in demonstrating thrombus within the aneurysm.

Efficacy of Isosorbide 5-Mononitrate in Patients with Stable Angina Pectoris: Acute Effect and its Subsequent Attenuation

V. Sansoy, M. Özcan, İ. Eren, M. Platin, N. Gürses, D. Güzelsoy, C. Demiroğlu

Isosorbide 5-mononitrate (IS 5-MN), an active metabolite of isosorbide dinitrate, is widely used as an antianginal agent. The acute and subacute effects of IS 5-MN, 20 mg twice daily in 8 patients and three times daily in other 8 patients with stable angina pectoris were evaluated using a placebo controlled, double blind, randomized trial protocol. There were two phases of 10 days each in which patients received placebo or active IS 5-MN. Acute testing was performed 2 hours after the morning dose on day 10. Acute testing showed a significant increase in exercise time after a first dose of IS 5-MN ($p<0.05$). Time to 1 mm of ST depression increased significantly ($p<0.05$) and peak exercise ST segment depression decreased significantly ($p<0.05$). Time to onset of pain, rest and peak exercise heart rate, rest and peak exercise systolic blood pressure, peak double product did not change significantly. After 10 days of therapy the beneficial effects of IS 5-MN on exercise time and exercise time variables were not sustained.

These data suggest that there is an attenuation of effect with respect to exercise time and ST segment variables. This may be a result of development of tolerance to IS 5-MN after 10 days of therapy.

The Relationship of Anatomic Localisation of Left Ventricular Aneurysm to Coronary Artery Lesions and Electrocardiographic Infarct Localisation

N. Gültekin, S. Üner, A. Baltay, M. Öztürk, A. Özder, C. Demiroğlu

Fifty patients (46 male, 4 female) with ischemic heart disease and left ventricular aneurysm demonstrated by coronary angiography and contrast ventriculography (CV) were included in this study. The relation of anatomic localisations of left ventricular aneurysms to coronary artery lesions, electrocardiographic infarct localisation, and sustained ST-segment elevation were studied.

It was shown that apical, anterior, and inferior aneurysms were most frequent and were associated with three-vessel or diffuse coronary artery lesions. The most frequently involved arteries were left anterior descending artery in cases of anterior and apical aneurysms and right coronary artery in those of inferior and inferolateral aneurysms. The incidence of sustained ST-segment elevation was found to be 42 %. A significant correlation existed between the anatomic and electrocardiographic localisations of left ventricular aneurysms.

Antianginal, Antiischemic Efficacy of Nicardipine in Normotensive Patients with Chronic Stable Angina Pectoris

C. Kocakavak, E. Kütük, S. Göksel, F. Gürkaynak

To assess the antianginal, antiischemic efficacy of nicardipine, a new calcium antagonist, the present placebo-controlled study was performed on 16 normotensive patients with chronic stable angina pectoris.

20 mg nicardipine or placebo was given to patients orally and thrice daily for a week. In the following week, placebo was given to the patients who had received nicardipine or vice versa. During the study, patients were permitted to take sublingual tablets of

isosorbide dinitrate (ISDN), only if they experienced angina. At the end of each period and 3 hours after the last dose of nicardipine or placebo, the patients underwent ergometric bicycle exercise testing. The test was maintained until maximal or tolerable workload and the following parameters were obtained: weekly ISDN consumption, heart rate (HR), systolic blood pressure (SBP), and double product (DP) (=HRxSBP) at rest and HR, SBP and DP at tolerable maximal work during the test, time to occurrence of 1 mm ST segment depression, time to occurrence of angina pectoris, maximal exercise time, maximal ST segment depression and tolerable maximal work.

Our study revealed that nicardipine at oral dose of 20 mg thrice daily had antianginal, antiischemic efficacy which was related to decrease in myocardial oxygen requirements and probably to increase in coronary blood flow and had no serious adverse reactions.

Evaluation of Uses of Dual Chamber Pacemakers in the Sick Sinus Syndrome Treatment and Their Success in Decreasing the Complication Rate

A. Emre, T. Ulufer, J. D. Maloney

The aim of this study was to evaluate the use of the new model DDD pacemakers in the treatment of symptomatic sick sinus syndrome (SSS) and their success for solving the commonly encountered problems in this disease. The study material consisted of 67 patients who were implanted with 4. generation DDD pacemakers between 1984-1988 in our institution. 45 of these patients were male and average age was 66±12 years. Clinical and laboratory experiences related to these patients had tachy-brady syndrome and 55 % had ventriculo-atrial retrograde conduction. With the use of these pacemakers; commonly encountered problems like endless loop tachycardia, pacemaker syndrome and thrombo-embolic phenomena were solved. However atrial fibrillation had been a continuing problem. Approximately 87 % of the patients were in DDD mode at the end of an average 27-months follow-up period.

Electrocardiographic Findings in Hemorrhagic Stroke: Subarachnoid Hemorrhage

E. Kumral, M. İşler, E. Terzioğlu, H. Yılmaz

Subarachnoid hemorrhage (SAH) can cause electrocardiographic changes via the sympathoadrenal system. We evaluated 59 patients with subarachnoid hemorrhage which had different etiologies; 90 per cent of these patients had ECG abnormalities. We observed QT prolongation (54 %), T wave inversion (49 %) and ST changes (41 %). Frontal interhemispheric bleedings and those close to the hypothalamic region commonly led to ECG abnormalities but the difference did not attain significant level. ST changes and QT prolongation seemed roughly to parallel the clinical severity. Endogenous substances, sympathetic system and other factors can lead to ECG abnormalities in subarachnoid hemorrhage.

Resting and Exercise Radionuclide Ventriculography in Healthy Men

I. Eren, V. Sansoy, M. Özcan, D. Güzelsoy, A. Berkyürek, M. Platin, Ş. Akbeniz, C. Demiroğlu

Radionuclide ventriculography (RVg) permits the assessment of left ventricular function during rest and exercise. Although it was initially reported to be a highly specific test for coronary artery disease (CAD), later studies reported a high false positive rate. We studied the exercise responses in ejection fraction (EF) and wall motion in 26 normal male subjects (ages 22-64 years) and the specificity of the method for the diagnosis of CAD. None developed wall motion abnormality and EF increased in all 26 (from 63.0 ± 5.6 to 72.9 ± 6.0). Considering an absolute 5 % increase as normal, the specificity was found 88.5 %.

It is concluded that despite inherent technical difficulties, exercise RVg is a highly specific method for CAD in men and an absolute increase of 5 % in EF may be accepted as normal. However it is essential to determine how much these technical difficulties affect the sensitivity of the method.

Case Report

Torsade de Pointes in a Case With Secondary Hypothyroidism

I. N. Aslan, Ç. Gökçe, N. Ayтуğ, S. Demir, C. Lüleci, M. Taşçı, O. Ayhan

A woman with partial hypopituitarism, secondary hypothyroidism and a slightly prolonged QTc interval was monitorized with the expectation of detecting rhythm abnormalities. Torsade de pointes and subsequent ventricular fibrillation were observed and treated before thyroid hormone replacement therapy was begun. Since adrenal deficiency was excluded and the QTc value did not seem to be affected by the antiarrhythmic agents administered to the patient, hypothyroidism was regarded as the main cause of the ventricular arrhythmias. Disopyramide could have been a contributory factor. The QTc interval returned to normal with the treatment of hypothyroidism.

Brief Communication

Percutaneous Pericardial Biopsy

T. Okay, İ. Dindar, M. Özdemir, N. Çağlar, S. Aksöyek

We report the application in a patient of a nonsurgical technique, for obtaining multiple pericardial biopsies in patients with pericardial effusion. This technique, slightly modified from that proposed by Endrys and coworkers, was performed for the first time in Turkey. An 8 Fr Teflon sheath is introduced by the Seldinger technique under fluoroscopy through the subxiphoid approach. The pericardial fluid is aspirated and air is allowed to enter the pericardium. This method outlines the pericardium. Thereafter, a biptome is inserted through the sheath and multiple samples are taken from different sites of the pericardium for histopathologic and bacteriologic studies.

Reviews

Assessment of Prognosis After Myocardial Infarction

M. B. Özin, M. E. Korkmaz, M. A. Oto

Mortality and morbidity in survivors of acute myocardial infarction remain high despite the technical and therapeutical advances in this area. To determine the prognosis of these patients is important in choosing the different therapeutic modalities.

Age, recent myocardial infarction, accompanying systemic diseases, location and type of the infarcti-

on, presence of cardiomegaly and/or left ventricular failure are the main factors determining the prognosis.

Although exercise testing, radionuclide ventriculography, thallium 201 scintigraphy, Holter monitoring, cardiac catheterization and programmed ventricular stimulation are the tests widely used to determine the prognosis, there is no agreement on the applications of these tests. So, each clinic must individualize its strategies in the therapy of these patients.

Cardiac Tumors: A Review Based on 20 Cases

K. Süzer, A. Aytaç, A. Akçevin, M. S. Bilal, T. Sarioğlu, R. Olga, Y. Yurdakul

A total of 20 patients with cardiac tumor operated on at the Hacettepe University Medical Faculty and the Cardiology Institute, Istanbul University, during 1973-1989 were reported. Eighteen patients had primary cardiac tumors and two had metastatic tumors.

Sixteen of the first group were benign and two were malignant. The most common clinical presentation was congestive heart failure. Indication for operation was established with echocardiography alone in three, cardiac catheterization plus echocardiography in five, and only cardiac catheterization in the rest of the patients. All cases were operated by cardiopulmonary bypass technique. In three, total circulatory arrest was also performed. Four (20 %) of these patients who had total or partial excision of the tumor, succumbed.

In cardiac neoplasms which is a rare cardiac disease, echocardiography has an important place both in diagnosis and in postoperative evaluation. Surgical resection is the treatment of choice in primary cardiac tumors and long-term follow up is important in all cases.

ECG Test

Selected Forthcoming Meetings