Cardiovascular Medicine

1. Staffs and Students (April, 2012)

Professor Mitsuaki Isobe
Clinical Professor Kenzo Hirao
Associate Professor Takashi Ashikaga, Tetsuo Sasano (Graduate School of Health Care Sciences, Biofunctional Informatics)
Junior Associate Professor Yasuhiro Yokoyama, Go Haraguchi (Department of Critical Care Medicine)
Assistant Professor Mihoko Kawabata, Ryoko Azuma, Shunji Yoshikawa, Ken Kurihara, Yasuaki Tanaka, Shingo Maeda, Taro Sasaoka, Yusuke Ebana (Medical Research Institute, Bio-informational Pharmacology), Daisuke Tezuka
Graduate Student Chisato Takamura, Yu Hatano, Kentaro Takahashi, Koji Higuchi, Tatsuya Hayashi, Kiyoshi Ohtomo, Tetsuo Kamiishi, Masahiko Setoguchi, Susumu Tao, Tomoko Manno, Hiroshi Kawata, Daisuke Ueshima, Tomoyo Sugiyama, Kensuke Ihara, Tomofumi Nakamura, Koji Sugiyama, Kei Takayama, Ryota Iwatsuka, Toru Miyazaki, Yoko Kato, Yuji Konishi, Yoichi Otaki, Masa-- Takigawa, Atsuhiro Yagishita, Tatsuya Fujinami, Osamu Inaba, Masahito, Suzuki, Naoyuki Miwa, Rena Nakamura

2. Education

We are dealing with pathophysiology of circulatory system especially cardiovascular diseases. Cardiovascular diseases are principal cause of death in our country. These diseases are categorized into several fields. They include ischemic heart disease, myocardial disease, valvular disease, atherosclerosis, arrhythmia, and infectious disease. The common final figure of these diseases is heart failure leading to patients’ death. Based on recent progresses in molecular biology and bioengineering our knowledge on the pathophysiology of these diseases has been expanded rapidly. There are variety of new diagnostisic technologies including imaging tests, hematological tests and electrophysiological tests. In addition, development in the treatment of cardiovascular disease is overwhelming. They include intravascular catheter intervention, catheter ablation and operation. Medical treatment has also been progressed rapidly. Further, gene therapy for cardiovascular diseases has started. All of these fields are our focus for education. In this course, students learn about modern knowledge and technologies in cardiovascular diseases, especially in the field of pathophysiology, diagnosis, treatment and prevention.

3. Research Subjects

The purposes of our investigation are to reveal the etiology and pathophysiology of cardiovascular diseases, and to develop new technologies for diagnosis and treatment. For that purpose we investigate clinical cases and model animals. Currently our investigations are focused on arteriosclerosis, atherosclerosis, cardiomyopathy, myocarditis, arrhythmias, cardiac rejection and heart failure. The relationship between gene mutation and cardiovascular disease, electrophysiology, myocardial cell transplantation and myocardial regeneration are also our major subjects of research.

1) Clinical study of gene therapy for coronary artery disease (Isobe)
2) Clinical study for treatment of acute coronary syndrome (Isobe, Ashikaga, Yoshikawa)
3) Molecular mechanism and treatment of myocardial ischemia and reperfusion injury (Isobe, Haraguchi)
We conduct collaborative researches with not only Medical Research Institute and other facilities in our university but also domestic and foreign institutes according to research projects. Since clinical cases in our hospital are diverse and abundant, clinical investigations are also our major target. Therefore, we can provide many research projects depending on students' need. We encourage and help students to pursue their own original way of investigation.

4. Clinical Services

Students are also encouraged to learn about clinical cardiology. They can participate in any clinical activities underwent in our hospital including cardiac catheterization, electrophysiological study, catheter ablation, various imaging tests, cardiac pathology, and patients care.

5. Publications

Review


Original Article


2. Ozaki, S; Ando, M; Isobe, M; Kobayashi, S; Matsunaga, N ; Miyata, T; Nakabayashi, K; Nakajima, Y; Nose, M; Ohta, T; Shigematsu, H; Sueishi, K; Tanemoto, K ; Yoshida, A; Yoshida, M; Yutani, C ; Arimura, Y; Fukaya, S ; Hamaguchi, S ; Hashimoto, H; Hiromura, K ; Ishizu, A; Iwai, T; Kaneko, K; Kataoka, H; Kawana, S; Kida, I ; Kobayashi, Y; Komori, K; Masaki, H; Matsumoto, T; Nagaoka, T; Nagasawa, K; Nojima, Y; Okada, M; Okazaki, T; Sakamoto, I; Shigematsu, K; Shiya, N; Takahashi, A; Takizawa, H ; Yamada, H; Yoshida, S; Fukui, T; Horie, M; Koike, T; Kumagai, S; Sasajima, T; Guideline for Management of Vasculitis Syndrome (JCS 2008) Digest Version. Circ J 75(2): 474-503, Feb 2012


25. Tanaka T, Suzuki J, Ogawa M, Itai A, Hirata Y, Nagai R, Isobe M. Inhibition of I kappaB phosphorylation prevents...