ISSN0535-1405

No. 502

INTERNATIONAL MEDICAL NEWS

International Medical Society of Japan
Since 1925

November 30, 2020

Published by International Medical Society of Japan,
Chairman, Board of Directors: Kenichi Ishibashi, MD, PhD
Editors: K. Ito, MD, PhD, T. Kondo, MD, PhD,
K. Ichihashi, MD, PhD, T. Murakami, PhD, R.Nagai, MD, PhD,
I. Taniguchi, MD, PhD, and T. Yamazaki, MD, PhD
3F MK Sangenjaya Building, 1-15-3 Kamiuma, Setagaya-ku,Tokyo154-0011,Japan.
TEL 03(5486)0601 FAX 03(5486)0599 E-mail: imsj@imsj.or.jp http://www.imsj.or.jp/

The 446th International Symposium on Therapy

The 446th International Symposium on Therapy was held by the Zoom Webinar on September 24, 2020. Dr. Ikuo Taniguchi, Director of the International Medical Society of Japan (IMSJ), presided over the meeting.

Up to date of Non-Pharmacotherapy of cardiac arrhythmias

Introductory Message from the Chair

Ikuo Taniguchi, MD, PhD
Director, IMSJ

I was worried because it was a web discourse like the last time since the conditions were different. I think that cardiologists are often consulted about arrhythmia therapy even among physicians from old times. In particular, drug therapy has many side effects, and many drugs cannot be prescribed normally, such as when starting or changing therapy.

Recently, the progress of non-drug therapy is more remarkable than that of drug therapy, and
it has advanced so much that even cardiologists like me have difficulty in keeping up with it.

I had an opportunity to hear the discourses of the two leaders in non-drug therapy.

The first was Kyoko Soejima, MD. Professor of Medicine Kyorin University School of Medicine Department of Cardiovascular Medicine, who gave a discourse under the title of "Update of Arrhythmia Diagnostic Technique and Therapy" about the progress in arrhythmia detection technology using a wearable device popular among people as well as a discourse on amazing leadless pacemakers.

The next discourse was given by Teiichi Yamane, MD, PhD Professor the Jikei University School of Medicine, one of the pioneers in the therapy of atrial fibrillation ablation, who has built an era to cure atrial fibrillation. He gave a discourse under the title of "Advancement of management for Atrial Fibrillation" from the history of atrial fibrillation to the latest therapy.

Currently, ablation therapy is being performed very often, and both of them are actually
realizing many ablation treatments. It is rare to have a valuable opportunity of hearing the discourses of the two people at the same time, which I appreciate.

Lecture I

Update of Arrhythmia Diagnostic Technique and Therapy

Kyoko Soejima, MD.
Professor of Medicine
Department of Cardiovascular Medicine
Kyorin University School of Medicine

Recent advance of detection technique and the -rapy for arrhythmia is profound. During the lecture, I would like to focus on the bradycardia therapy-leadless pacemaker and arrhythmia detection.

Mainstay of bradycardia therapy is pacemaker. Over 60 years have passed since the implantable pacemaker was invented. Pacemaker consists of a generator and leads. Majority of the acverse events associated with pacemakers is related with a gene rator (hematoma, infection, skin erosion: 11% in 5 years) or a lead (lead fracture, insulation breakage, venous thrombosis, tricuspid regurgitation: 8% in 5 years). Severe adhesions are usually experienced with leads implanted over the years, and lead extraction carries certain risks. Therefore, there has been a long-lasting hope to develop the leadless pacemaker, but its development was not easy mainly due to the battery longevity and fixation to the myocardium. In 2012, the currently available leadless pacemaker, Micra™ (Medtronic) was imp lanted in human. The transcatheter pacemaker is a single chamber device, and is 0.8cm3 and length of 2.59cm, which is approximately 1/10 of the usual pacemaker. Despite its small size, the battery longevity is 12 years, rate-adaptive pacing, MRI conditioned, and has automated pacing capture threshold management. The device is affixed to the myocardium using 4 nitinol tines. In addition, using the accelerometer of the device, atrial contraction is sensed, and mode of VDD became possible, allowing the AV synchrony for the patients, and is available in US since January 2020. If communication with a second or third device placed in the atrium and left ventricle becomes possible, dual chamber pacing and cardiac resynchronization pacemaker will be completed with leadless system. This will bring a bright future to the device patients.

Atrial fibrillation is the most common arrhythmia, with a global health burden of 33.5 million patients worldwide. Its prevalence has increased 5-fold and expected to double by 2050. The risks of atrial fibrillation include stroke, congestive heart failure, increased mortality and dementia. However, the detection of asymptomatic paroxysmal atrial fibrillation is challenging. It has been shown that longer the monitoring, the higher the detection rate. Patient-operated devices was effective. Recently mobile health technology advancement is expected to contribute dramatically to the early and effective detection of atrial fibrillation. Apple Watch and other wearable devices detect the pulse irregularity, sends an alarm to the patient to record the ECG using the watch, then the diagnosis can be made. In light of COVID19 pandemic, the expectation of the mHealth development and improvement is aspired.

Lecture II

Advancement of management for Atrial Fibrillation

Teiichi Yamane, MD,PhD
Professor
The Jikei University School of Medicine

Among various fields in the Cardiology, there have been remarkable recent advances in approaches/ therapies for the management of atrial fibrillation (AF). Almost 20 years have passed since AF became curable by catheter-based approaches in the end of 20th century. In addition to the traditional radiofrequency-energy, cryothermy coagulation and laser-energy using the balloon technology have become the choices for catheter ablation. As for the targets of the substrate of atrial fibrillation, multiple approaches including the linear ablations, CFAE ablations, drivers/rotors, and the GP ablations have been focused along with the progression of 3D technologies.

One of the recent topics is the advancement of catheter-based left atrial appendage closure, which is another choice for patients with contra-indication of anticoagulative agents. In this lecture, I would like to discuss both the utility and limitation of recent progression in the nonpharmacological approaches for atrial fibrillation.

Discourse

Introduction of the speaker of discourse

Ikuo Taniguchi, MD, PhD
Director, IMSJ

This time, I heard from Mr. Seiichiro Nishioka who retired from President of the Hiroshima High Court in 2013 and became an attorney after having actively worked as a judge for 40 years. He talked about his memories in many judgments in family courts and civil lawsuits. In particular, I listened to the story of medical cases, which was very interesting. I respect him for having finished his working as a judge with the motto " The law is for people." I appreciate him for having paid his attention to my unreasonable requests.

Looking back on 40 years as a judge

Seiichiro Nishioka
Of Counsel Asahi Law Offices

From 1975 to 2014, for nearly 40 years, I was mainly in charge of civil and family court cases as a judge. Looking back over 40 years and touching on my experience in medical proceedings, I would like to share my thoughts on what the law is for.

It was when I first drafted a judgment as a judge. The presiding judge pointed out that the content of the draft judgment was inadequate one after another, so I had an excuse and said, "I will write a better judgment next time." He had unexpected harsh things to say that "There are no two cases that are the same for both the parties and you. It is just an excuse to do everything in the next case without doing everything in each case that you were in charge of as a judge." There are no two cases that are the same, because the subject of the trial is a dispute involving humans. As a judge, I thought that I should do my utmost to make every effort to show my full potential at that time in each case so that I would not make excuses later.

Also, when I was younger, a female tenant of a room in a building was settled in a case where she was required to vacate the room by provisional disposition. Despite persuading the woman to reconcile, I thought that she had to legally admit to ordering a surrender, she cried and said, "Why can a young person like you decide my life?" From the standpoint of the parties, people are not quite convinced that it is even correct in law and logic. How to convince people became a challenge for me after that.

I have experienced medical proceedings since I was young, but in the past, in addition to being difficult in content, there was no fixed method of hearing, and it was a representative of difficult cases that took a long time. The reform of the judicial system began in 1999 when I was in the Tokyo District Court, and at that time I was involved in the work of setting up the Medical Proceedings Concentration Department, which intensively conducts the trials of medical proceedings.

There, I worked to improve the proceedings of medical cases, quickly sorting out the issues, and treated with the proceedings in a planned manner. While promoting the hearing, I carefully tried to explain my own feelings (the way of thinking about the results of the trial) in the process of trials. Among them, I felt that there were many cases of deep-seated distrust between the patient and the doctor as the background, origin and cause of the disputes in the medical malpractice proceedings. There were many claims that the doctor's obligation to explain was not exhausted, but the true intention might be that there were many cases where the patient was dissatisfied with the inadequacy of the doctor's words and the attitude at the time of explanation.

I devised the trial method as described above, and while clarifying the facts, I tried to explain the results of the trial carefully. Many cases could be settled with reconciliation by working from the court to resolve the conflict between the two sides. At the time of the settlement, there were many cases in which both parties had a relieved expression, and I felt a sense of fulfillment.

I talked about a part of my judge's experience. Judges are legal professionals, and you may think that a trial is a world of winning and losing, but the actual job of a judge is to meet people repeatedly. While interacting with the parties and attorneys of all types, I was worried about how to resolve the dispute reasonably and appropriately, writing a number of judgments. It is my feeling that I have endeavored to reach a convincing settlement of the parties in many cases.

Also, even if it is a legally correct solution, it is difficult for human beings to be convinced just by stating it in the judgment. In order to be convinced, it is necessary to earn the trust of the parties and interested persons as a judge and as a human being. Then, how can they trust us? I thought it was necessary to treat both parties fairly through the procedure and listen to the opinions of both parties as honestly and politely as possible.

The job of a judge is to first understand the law accurately and apply it to the case, and in that sense, he needs to be a legal professional. However, as a major premise, I think it should be understood that the law has been created for human beings to live, and is by no means a tool for competing people.

The founding philosophy of Jikei University is the words of Guru Kanehiro Takagi, who says, "Don't diagnose illness, but see the sick." I thing that the words exactly mean that medical care is for humans.

If we study both law and medical care, I think we can say that the underlying things are equally for each and every human being.