



Mission: To enhance cooperation among cardiologists on radiation safety in cardiac catheterization procedures and in procedures that utilise ionizing radiations

From the Editor's Desk

Dr. Kui Hian Sim

Sarawak General Hospital, Kuching, Malaysia
(sim.kui.hian@health.gov.my)



Just a year ago, we talked of having a newsletter for the Asian Network of Cardiologists in Radiation Protection. Today, we have volume number 3 released. This has been made possible with the tremendous efforts of our interventional cardiology colleagues from Thailand, Singapore, Vietnam and IAEA. It is so nice to see that we have our own data to talk about instead of “guesstimates” or talking based on work done in other countries. We are proud to see not only data on situation analysis on radiation protection but also on improvements achieved as it is a very significant step forward in such a short time. The recent publications in peer reviewed journals regarding radiation in cardiology is a timely reminder as we have responsibility towards our patients, our colleagues, our family and loved ones and lastly to our chosen profession cardiology.

Though we are a relatively a small group of interventional cardiologists in the region being passionate about radiation protection; it is pleasing to note that our colleagues are managing to introduce the topic of radiation protection into their respective countrys' scientific meetings, live demonstration courses and in newsletters. I strongly urge the rest of our colleagues in the region to do the same. All this would not have been possible without the encouragement, support and initiative from IAEA especially the zealous and infectious efforts of Dr. M.M. Rehani (M.Rehani@iaea.org).

I must thank Dr. Suphot Srimahachota, Dr. Damras Tresukosol and other colleagues in

the organizing committee of 4th Asian Interventional Cardiovascular Therapeutics (AICT 2008) conference for having agreed to have number of sessions on radiation protection. Lastly, I urge you to share and circulate this newsletter, within the cardiac fraternity. I welcome your comments and shall be happy to receive your contributions in radiation safety.

My journey in radiation protection

Dr. Suphot Srimahachota

**Division of Cardiology
King Chulalongkorn Memorial Hospital
Bangkok, Thailand**
(s.srimahachota@yahoo.co.th)

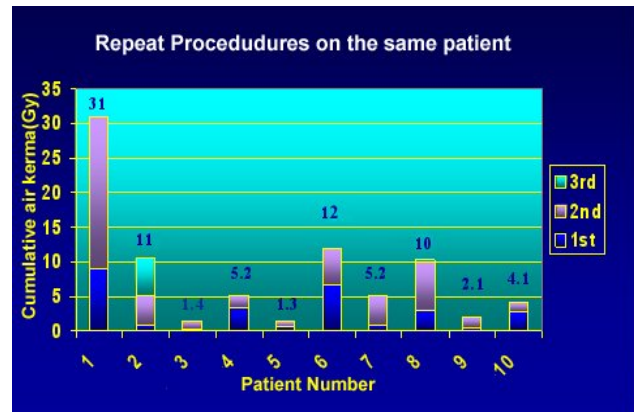


I have been an interventional cardiologist since 1998. I have been performing cardiovascular interventional procedures including coronary, peripheral and structural heart disease interventions. My cath lab consists of 3 angiography units including one for electrophysiology. I did not have any formal training in radiation protection. I attended a lecture of Prof. Madan Rehani when he visited Thailand in 2002. This was the starting point for me and I can say that I got initiated into this subject. Fortunately, Chief of our Radiology department forwarded to me information about the course on radiation protection organized by the IAEA in May 2004 in Vienna. I had the chance to participate in IAEA course. It created interest and enthusiasm in protecting myself, my colleagues and especially my patients. After coming back from the course, I created awareness and gave lectures to the staff in my lab on how to protect yourself and the patients. Then, I arranged regular lectures for

fellows undergoing training in my center. In 2005, Cardiovascular Intervention Society of Thailand organized a one-day session in Bangkok with the help of Dr. Rehani in which large number of cardiologists and paramedical staff participated. Last year, IAEA created an Asian network of cardiologists in radiation protection and I was nominated to join this network. The Figure on right side shows some data that I presented in first meeting of the network. It consists of patients undergoing repeat procedures over short period of time. I was surprised that one patient received very high cumulative air kerma of 31 Gy. Fortunately it was spread in two sittings in 22 months. My journey in this field indicates that most of us do not know where we are in terms of radiation doses to self or patient.

I am very happy that we have included this topic in the 4th Asian Interventional

Cardiovascular Therapeutic (AICT) meeting in Bangkok, Thailand and my message to my colleagues is “Be aware of the radiological protection of your patient and you will also be improving your own occupational protection.”



What changes have occurred in my practice?

Dr. NGO MINH HUNG,
Interventional Cardiologist
Choray University Hospital, Hochiminh City,
Vietnam
(drngominhhung@gmail.com)



I attended the course organized by IAEA in December 2006 in Bangkok and met Dr. Rehani. It was really eye opening for me. It created interest and enthusiasm in protecting my patients, my colleagues and myself. I am not scared about radiation anymore as I have the knowledge to protect myself and others. After coming back from the course I have taken following actions: Present and deliver materials relating to radiation protection to colleagues, apply routinely what I learnt into practice as per details given in following paragraph, wrote a chapter about radiation protection in a journal and I keep in touch with I.A.E.A network of cardiologists in radiation protection.

Changes in practice: Using 2 personnel monitoring badges in contrast to one used

earlier, avoiding irradiation of the same area continuously to achieve skin sparing, avoiding steep angulations, proper wedge filter positioning, recording patient doses using DAP and cumulative air kerma, maintaining and periodically testing protective devices such lead aprons, getting angiography machines routinely tested for QC parameters and liaising with medical physicist.

In the new machines that we bought, I ensured that it has lead flaps for protection of legs, last image hold, fluoro recording and virtual collimation. On point of knowledge, I was unaware as to where all radiation came from, but now I am clear. These actions have made a lot of changes in my Cath_Lab activities. I am able to avoid unnecessary radiation to our lovely patients as I am aware of “What I do and How to protect”.

Contact us:

Prof. Dr. SIM Kui-Hian
MBBS(Hons)(Monash), FRACP, FACC, FCSANZ, FESC,
FAHA, FSCAI, FAPSIC
Head, Dept of Cardiology,
Sarawak General Hospital, MALAYSIA.
Office +60-82-276 666/+60-82-276 593
Email sim.kui.hian@health.gov.my