IAEA Technical Cooperation Programme

September 2011

Strengthening nuclear cardiology in Cuba

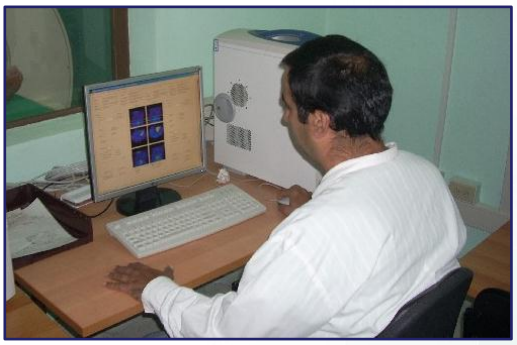
The challenge…

Cardiovascular diseases are the main cause of death in Cuba. Coronary heart disease is responsible for 69% of all cardiovascular deaths. Many programmes have been developed in an effort to control the most important associated risk factors. In addition, research projects have been carried out as part of the Ministry of Public Health's programme on non-transmissible chronic diseases.

The project…

The IAEA was asked to carry out a project to strengthen nuclear cardiology techniques in Cuba in support of a study of patients with coronary heart disease, using non-invasive methods. The results were to be integrated in a diagnosis algorithm, focusing on improving the quality of medical care in accordance with the principles of evidence based medicine.

Through a technical cooperation project, the IAEA helped Cuba acquire new nuclear medicine equipment for two clinical centres (Institute of Cardiology and Nephrology), and provided expert services, fellowships and scientific visits on nuclear cardiology techniques, clinical applications in cardiac patients, and the production and control of radiopharmaceuticals used in nuclear cardiology. Two national workshops were also conducted, one on nuclear cardiology and its relationship with other imaging techniques, and one on nuclear medicine applications in cardiology, nephrology and neurology.



The impact…

As a result of the project, there has been a significant increase in the number of nuclear cardiology studies carried out at the Institute of Cardiology (265 in 2008, 1027 in 2010), and a wider variety of nuclear medicine studies have been performed (bone, brain and oncology). The Institute of Nephrology has also begun to use nuclear cardiology techniques in kidney diseases.

Nuclear medicine staff were trained and the training provided to specialists (cardiologists, cardiovascular surgeons, clinicians, medical physicists and technologists) from the Institute of Cardiology and other institutions in the country improved significantly. A higher quantity and quality of clinical investigations has also been achieved.

Technical cooperation project CUB/6/016: Strengthening Nuclear Cardiology in Cuba for Diagnosis and Treatment of Coronary Heart Disease Patients