

DOST's new lab to cut scan procedure costs

Written by Allan Ace Aclan, S & T Media Service, DOST-STII
Thursday, 31 January 2013 06:09

Starting this year, Filipinos may avail of cheaper medical diagnostic tests as the Department of Science and Technology (DOST) is set to locally produce Technetium-99m (Tc-99m). This silver-gray, radioactive metal is used for medical and research purposes, including evaluation of the medical condition of the heart and other organs, and studying blood flow.

This prospect comes with the recent unveiling of the Radioisotope Laboratory building at the DOST's Philippine Nuclear Research Institute (PNRI) office in Diliman, Quezon City. The laboratory, which houses the generator plant for the isotope, is the first Tc-99m production facility in the Philippines.

PNRI Director Alumanda de la Rosa said that producing Tc-99m locally will cut at least 50 percent of hospital procedures.

She also added that by February, PNRI would be able to provide all the Tc-99m-based radiopharmaceutical needs of hospitals at a cost lower than the current prohibitive cost of imported radiopharmaceuticals.

Also called Molybdenum 99, Tc-99m is a radioactive tracer chemical used in almost 80 percent of diagnostic imaging procedures such as bone and lung scans, and renal scintigraphy. It is widely preferred because of its short-lived gamma rays and its capacity for normal imaging techniques.

Over 35 hospitals around the country with nuclear medicine centers have to import Tc-99m generators, thus making medical procedures too costly for the public. A typical imported generator costs \$1,000—higher than its cost in Indonesia which is \$388.

However, the local production of Tc-99m will make diagnostic tests more affordable and accessible to a wider segment of the population.

The facility was completed with assistance from the International Atomic Energy Agency (IAEA) to ensure that the laboratory complies with good manufacturing practices and radiological safety requirements.

The facility also aims to localize the production of radiopharmaceutical products and make them available to government hospitals, particularly for charity patients, at a subsidized cost.

According to PNRI Director Alumanda de la Rosa, by February 2014, PNRI would be able to provide for all the Tc-99m-based radiopharmaceutical needs of hospitals at a cost lower than the current prohibitive cost of imported radiopharmaceuticals.

Meanwhile, DOST-PNRI is preparing the installations of Tc-99m hot cell facility for the production of Tc-99m generators and studies on quality control procedures for the preparation/production of Tc-99m and Tc-99 radiopharmaceuticals.