

New Alcyone cardiac scanner installed in the Military Institute of Medicine — report from the opening ceremony and symposium Warsaw (Poland), February 9, 2012

On the 9th of February, the first Central-Eastern European nuclear medicine laboratory equipped with an Alcyone Discovery NM 530 cardiac scanner was opened in the Military Institute of Medicine in Warsaw.

The new technology features new types of detectors: instead of scintillation crystals, such as NaI(Tl), which are used in traditional gamma cameras, the Alcyone system is based on CZT (cadmium, zinc, telluride) semiconductor detectors. The detectors are arranged into arc-shaped gantries which makes it possible to minimise distance from the patient's body, and thus optimum conditions for the acquisition of cardiac data. A strong plus-point of the system, compared to SPECT gamma cameras, is the elimination of gantry movement during the procedure. All the data necessary for the tomographic image reconstruction are acquired simultaneously by all the detectors. This solution makes it possible to e.g. reduce the scanning time and improve the patient's comfort during the acquisition process. Semiconductor detectors are characterised by high sensitivity and resolution capability. As a result the dosage of the administered radiopharmaceutical can be decreased by as much as 2/3 which allows reducing patient's exposure to ionising radiation without affecting the quality of examination results. The dedicated cardiac scanner will enable optimum and more accurate imaging of myocardial perfusion and functions.

The first part of the opening ceremony was organised as a press conference with journalists held in the Nuclear Medicine Department of the Military Institute of Medicine where the scanner is installed. The conference by Brig. Gen. Grzegorz Gielerek (MD PhD), Director of the Military Institute of Medicine, Col. Andrzej Chciałowski (MD PhD), Deputy Science Director, Dr. Mirosław Dziuk (MD PhD), Head of the Nuclear Medicine Department, and Jerzy Masiakowski (PhD), GE Healthcare Manager. The Director



Brig. Gen. Grzegorz Gielerek (MD PhD), Director of the Military Institute of Medicine and Prof. Leszek Królicki (MD PhD), National Consultant in Nuclear Medicine as the chairmen of the scientific symposium "Alcyone scanner in cardiac diagnostics"

of the Military Institute of Medicine and the Head of the Nuclear Medicine Department welcomed the participants and answered questions from the journalists about the role of isotopic testing procedures in modern cardiology, and explained the value of clinical examinations performed with the new scanner.

The second part of the opening ceremony was held as a scientific symposium titled "Alcyone scanner in cardiac diagnostics", organised in the main hall of the Military Institute of Medicine. The symposium was attended by the management of the Military Institute of Medicine, representatives of the Science Division, Procurement Department, Heads of Clinics and Diagnostic

Laboratories as well as cardiologists of the Military Institute of Medicine. A number of prominent specialists in nuclear medicine and cardiologists from across Poland were also invited to participate in the symposium. The session was chaired by: Brig. Gen. Grzegorz Gielerak (MD PhD), Director of the Military Institute of Medicine, Prof. Leszek Królicki (MD PhD), National Consultant in Nuclear Medicine, Dr. Mirosław Dziuk (MD PhD), Head of the Nuclear Medicine Department at the Military Institute of Medicine. The first lecture, held by Dr. Magdalena Kostkiewicz (MD PhD) from the John Paul II Hospital in Cracow, concerned present-day potential of nuclear cardiology. Of great interest to the audience was the presentation of clinical cases of procedures carried out in the Nuclear Medicine Department using the installed Alcyone technology. The presentation was prepared by the physicians from the Nuclear Medicine Department of the Military Institute of Medicine: Cpt. Stanisław Piszczek (MD) and Mjr. Andrzej Mazurek (MD). Dr. Bernard Songy from the Centre Cardiologique du Nord in Paris described his own experience of working with Alcyone scanner as the Parisian Centre has held a total of over 15 000 procedures to date. A highly valuable contribution to the session was made by Renata Mikołajczak (PhD Eng) from the National Centre for Nuclear Research (POLATOM) in Świerk who spoke about "New radiopharmaceuticals applied in nuclear cardiology".



The Nuclear Medicine Department team with its Head and the GE representative in the Alcyone scanner laboratory

The ceremony ended with a visit to the Nuclear Medicine Department of all the invited guests and a presentation of the scanner and the Xeleris 3 image processing station.

Nuclear Medicine Review Editors