HERCA Heads of the European Radiological protection Competent Authorities

www.herca.org

HERCA Working Group on Medical Applications for Harmonizing the Implementation of Radiation Protection Regulation in Europe

Bly R on behalf of HERCA WG on Medical Applications[1]
Trueb P on behalf of HERCA WG on Medical Applications[2]
[1]Radiation and Nuclear Safety Authority (STUK), P.O. Box 14, 00881 Helsinki, Finland; ritva.bly@stuk.fi
[2]Federal Office on Public Health, FOPH, Bern, Switzerland; philipp.trueb@bag.admin.ch

1. Introduction

HERCA (Heads of the European Radiological protection Competent Authorities) is a voluntary association in which the Heads of Radiation Protection Authorities work together in order to identify common issues and propose practical solutions for these issues. HERCA is working on topics generally covered by provisions of the EURATOM Treaty. The HERCA Working Group on Medical Applications (later called WG MA) will cover all radiation protection issues concerning medical applications of ionizing radiation for diagnosis and therapy. The focus of the WG MA is on the harmonizing the implementation of radiation protection regulation in Europe especially concerning new medical applications.

2. Materials and methods

The WG MA conducts its work through work packages (WPs) on patient release criteria and stakeholder involvement with CT-manufacturers, justification (including screening and exposure of asymptomatic individuals in health care) and optimization. Further consideration will be given to the formation of a sub working group on radiation therapy. WG MA carries out surveys among radiation protection authorities, prepares statements and discuss with stakeholders.

The HERCA WG MA enhances harmonizing the implementation of the radiation protection regulation on medical applications, focusing on justification and optimization by

- Sharing the information among regulatory bodies of good practices on implementing the radiation protection regulation on medical applications. Examples of that are the statement of the patient release criteria and surveyed good practices for controlling exposure of asymptomatic individuals in health care.
- Enhancing the exchange of knowledge on technical and scientific aspects of the radiation protection of new medical applications. Competence of the radiation protection authorities to control optimization of new medical techniques has been surveyed and discussed.
- Preparing guidance for implementing radiation protection regulation on medical applications. One example is the collaborative work for harmonizing suspension levels for imaging equipment in Europe.
- Highlighting and reporting through HERCA of needs for developing European guidance and providing advice on implementing and modifying existing directives from the perspective of regulators. One example is justification of health assessments.

The HERCA WG MA enhances harmonizing the implementation of the radiation protection regulation on medical applications, focusing on justification and optimization by

- Enhancing the exchange of information on best available radiation protection practices between regulatory bodies and other relevant competent authorities, professionals, manufacturers and patients.
- Enhancing the exchange of scientific knowledge between the experts and regulatory bodies.
- Co-coordinating national efforts under the umbrella of HERCA to maximize impact in stakeholder involvement.

4. Results

Criteria for patient release after I-131 therapy have been developed. The approved HERCA document, entitled " 131I therapy : patient release criteria" contains the general principles and the approach that the HERCA member countries have agreed upon.
In this document, it is stated:
"At hospital, before releasing the patient, the medical practitioner makes sure that a declaration is handed over to the patient, stating that a given activity (X MBq) of I-131 was administered to the patient at a given moment (date) and informing where further explanations can be obtained (contact details). This declaration is provided in English and, where applicable, also in the local language(s)."
According to that statement, when a patient is released from a nuclear medicine ward, a "card" or a "paper" should be given to him or her. This information sheet will be referred to as a "card" further on, whatever the actual form it may take. The aim of the information, given in this "card" is to contribute to assuring a better radiation protection after the release of patients treated with I-131. It can be helpful in avoiding unnecessary exposure of health professionals, undertakers and members of the public.
fied high doses to patients.

A dialog with important stakeholders (e.g. the major CT-manufacturers worldwide) is established discussing a future plan of action to ensure avoiding unnecessary and not justified high doses to patients (see a poster by J. Griebel).

A coordination of efforts with North American agencies has been established (FDA, NCRP) The agreement has been developed to facilitate interactions between the HERCA and the FDA and NCRP regarding radiation protection initiatives such as optimizing radiation dosage from medical imaging and reducing unnecessary radiation exposure to patients from CT.

Data on the collective dose contribution from the Top 20 most important X-ray procedures have been published in European IRPA in 2010 (Aroua et al.) and the study will continue in co-operation with the DDM2 project (see a poster by R. Bly).

5. Conclusions

As a relatively young organization WG MA has succeeded to create a structure to achieve the objectives that HERCA has determined. WG MA has its meetings twice a year and reports to the Board of Heads of HERCA. In the meetings observers from EC, WHO and IAEA are invited.

The main focus at the moment is on the justification process to find out good practices of radiation protection authorities to promote three A's principle (Awareness, Appropriateness and Audit) and to control implementation of justification in practice. Determination of health assessment of asymptomatic individuals and inhibition of unnecessary exposure are also part of the work.

The ongoing work is also focusing on the training of the staff of authorities inspecting medical use of radiation. Harmonization will be carried out by giving recommendations and having European training activities.