

conferenceseries.com JOINT EVENT
4th International Conference and Exhibition on
Medical Physics and Biophysics
2nd International Conference on &
Nuclear Medicine & Radiation Therapy

July 27-28, 2017 Rome, Italy

A useful checklist for quality controls on LINAC devices

G Acri, E Ruello, P Inferrera, L Denaro, C Sansotta, B Testagrossa and S Pante
University of Messina, Italy

In cancer treatment LINAC (Linear Accelerator) is fundamental for therapeutic purposes, because it directly damages DNA molecules of the tumour mass through X-photons or electrons, respectively, for the deepest and the most superficial masses. Because of the use of directly and indirectly ionizing radiation, it is necessary and essential to perform quality control (QC), not only to protect the patients but also the staff, such as physicians and radiology technicians, who work in the same environment in which instrumentation operates. QCs are also fundamental because they permit the identification of the source of possible equipment malfunction, pointing to preventive or immediate maintenance requirements. To ensure the best working conditions, physicians and radiology technicians must follow the rules established by the International Atomic Energy Agency (IAEA), such as the location of the site or the technical and physical characteristics of the equipment and in this contest, periodic QCs have been recommended by manufacturers and Medical Physicist's Organization to test the performance of medical systems. The aim of this work is to create a checklist which contains the parameters to monitoring to perform the established QCs. It is important to have confirmation of several physical characteristics of the medical devices in order to speed up the QC procedures, making them even more accurate, in fact, the use of a checklist avoids reading the entire procedure, using only a list of actions that the operator must indicate if he has already carried those out, or not?

gacri@unime.it

Access to health—breast cancer awareness and screening camps in rural India

Gunjan Bhardwaj
EBS University of Business and Law, Germany

Breast cancer is the most common cancer of urban Indian women and the second most common in rural women. Owing to lack of awareness of the disease in India and in absence of breast cancer screening programs, majority of breast cancers are diagnosed at a relatively advanced stage. Government agencies, NGOs and charity organizations have put great emphasis on improved breast cancer awareness among masses for promotion of early detection, providing comprehensive treatment module, providing support for breast cancer management and for screening and rehabilitation. The efforts have resulted in an improved survival and quality of life of Indian breast cancer patients, but the improvement is more pronounced in urban population. In rural areas, there is still a lack of good health care and awareness among masses regarding the importance of early breast cancer screening and thus cases of late diagnosis are more prevalent. In addition, there is still an identified lack of breast cancer screening programs in rural areas which further causes late diagnosis. The other common factors that lead to late diagnosis include delays on the part of womenfolk of rural areas to seek advice for a recognized health problem which is mainly due to financial reasons, social/cultural reasons such as general inhibition of women to see the doctor for breast ailments, general scare of people towards cancer like disorders and a general indifference of women towards their health. In rural areas illiteracy is widespread and people are inhibited and not motivated to come to the hospitals for screening/checkup. Considering various factors of cancer incidence rate, to address the most common barriers such as lower cancer literacy, lesser availability and accessibility of proper medical facilities, three Indian states were shortlisted to initiate the project "ECHO" by organizing Breast Cancer Awareness and Screening Programs for Rural and Semi-Urban Indian Population. In addition to being a CSR approach, Project ECHO also increased the cancer literacy amongst the rural population and emphasized on health education, early diagnosis of breast cancers and more public facilities for breast cancer treatments.

gunjan@innoplexus.com