Talk 9.4

Ionising radiation exposure of Medical staff: risks and prevention

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Nowadays, the use of ionising radiations in medical exams is unavoidable: whether for radiology diagnostic or radiotherapy. The use of such radiations is in most cases necessary or benefit for patients but the risks to health for medical staff are not always neglected.

In this study, we review the results of some studies in term of radiation doses received by hospital staff in different medical exams: radiotherapy, conventional radiology, interventional cardiology...etc. [1,2]

We dress a mean evaluation of the rate exposition to ionising radiations in each radiological exam with an estimation of the maximal dose received by the medical operator per year.

Finally, we propose, when it is possible, some solutions to minimize radiations risks.

References:

- [1] M. Rehania, Medical physics Volume 42, Issue 6 Parts 34
- [2] INTERNATIONAL ATOMIC ENERGY AGENCY, Radiation Protection and Safety in Medical Uses of Ionizing Radiation, Specific Safety Guides, 2018