

Variability in fluoroscopic time during interventional non-cardiac procedures performed outside of the radiology department a single center study

ABSTRACT

Aims and objectives:

Increasing physician awareness of patient exposure to radiation is an important step towards the reduction of potentially harmful effects of radiation. Published studies demonstrated that providing physicians with feedback regarding their fluoroscopy time leads to a reduction in average fluoroscopy times.

The aim of this work was to publish our medical center data observed during the past year; fluoroscopy time was monitored for radiation protection purposes and the data are analyzed.

Methods and Materials:

The radiation safety officer in diagnostic radiology monitored the fluoroscopy time registered for all procedures. Fluoroscopy time is one of multiple radiation dose indices used in radiation safety auditing. Such auditing is nowadays turning into requirement of patient care safety and quality improvement; as indicated by accreditation bodies both nationally and internationally. High radiation dose procedures must be identified for optimization.

Results:

53 events of fluoroscopic time exceeding 20 minutes were analyzed. The maximum fluoroscopic time noted was 43 min. The longest procedure was Endoscopic retrograde cholangiopancreatography (ERCP). The longest procedure was found to be performed by less experienced physicians and surgeons. Our data is compared with the internationally reported data.

The data were presented as a feedback to the concerned department and to the hospital's radiation safety committee.

Conclusion:

Information about fluoroscopy time taken by interventional radiologist during procedures can be used as a tool for patient dose optimization. Reducing fluoroscopic time (FT) is a radiation protection goal, since it serves the purpose of protection for both the patient and the workers.