

**International Conference on Occupational Radiation Protection:  
Strengthening Radiation Protection of Workers –Twenty Years of Progress  
and the Way Forward**

Contribution ID: 203

Type: **Poster**

## **Evaluation of occupational radiation doses in orthopedic surgery procedures for fractures of the proximal femur**

The use of fluoroscopy procedures in intraoperative orthopedic procedures has increased in the last years since it allows a better assessment of the anatomical structures under surgery and visualization of implants, besides reducing the time needed for the surgical procedure and length of hospital stay of the patients and risk of complications [1]. Despite these benefits, scattered x-ray radiation received during the procedures from fluoroscopic equipment represents a risk of radiation-induced effects to the orthopedic surgeons and the medical staff. There is growing concern about the radiation doses received by orthopedists due to surgical procedures since procedures are executed at close distances to the patient and, in general, orthopedic surgeons are not trained in radiation protection and the procedures adopted using fluoroscopy systems may not be optimized, resulting in high doses to the patient and medical staff. There are few studies published regarding the occupational doses during orthopedic interventions.

The aim of this paper is to estimate the occupational radiation doses and risk to medical staff during surgical procedures on fractures of the proximal femur, and therefore contribute to the optimization of radiation protection to staff.

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**Session Classification:** Session 8. Occupational radiation protection in medicine

**Track Classification:** 4. Occupational radiation protection in medicine